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Proceedings of the National Summit on Legal Preparedness for **Obesity Prevention and Control**

GUEST EDITED BY DONALD E. BENKEN, MEREDITH A. REYNOLDS, AND ALICIA S. HUNTER

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LETTER FROM THE EDITOR

ecently, First Lady Michelle Obama initiated a vegetable garden in the South Lawn of the White House. The timing could not have been better — given national concern about obesity — to teach children (and adults) about the importance of healthful eating. Certainly, this garden shows the First Family's interest in their health and serves to model nutritious eating, but as this supplemental issue of JLME (vol. 37, no. 2) points out, there needs to be multiple settings to help curb the obesity epidemic. Such settings include involvement from communities, work places, and schools, as well as from federal, state, and local levels of government. No longer considered an issue that affects just one person or one family, obesity is a public health concern that affects the population at large. While the personal choice to maintain a healthy weight is still an important factor in obesity prevention and control, experts, including our authors, now believe that rates of obesity and overweight are also heavily influenced by environmental, genetic, and even, political factors. As articulated by the authors of this supplement, it will take an integrated approach to prevent and control

This supplemental issue of *JLME* examines the ways in which the law can be used to promote healthier eating habits and increased physical activity. This supplement, entitled "Proceedings of the National Summit on Legal Preparedness for Obesity Prevention and Control," co-edited by Donald E. Benken, Meredith A. Reynolds, and Alicia S. Hunter, is divided into three sections. Section 1 broadly addresses the science and legal issues affecting obesity prevention and control, as well as the government's role in this endeavor. Section 2 assesses the current state of legal preparedness by examining four core elements that affect obesity. And Section 3 examines those four core elements and identifies ways in which various sectors and jurisdictions could utilize them to combat obesity.

The American Society of Law, Medicine & Ethics would like to thank the Centers for Disease Control and Prevention and the Robert Wood Johnson Foundation, among other participating organizations, for their help in bringing this concern to national awareness. We hope that you enjoy reading the supplement, appreciating that obesity prevention and control requires policy and environmental changes. With this issue, we are on our way to achieving that goal.

Courtney Mc Clellan Assistant Editor JLME

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Independent articles are essays unrelated to the symposium topic, and can cover a wide variety of subjects within the larger medical and legal ethics fields. These articles are peer reviewed.

Columns are written or edited by leaders in their fields and appear in each issue of JLME.

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National Summit on Legal Preparedness for Obesity Prevention and Control

EDITORS' PREFACE

Donald E. Benken, Meredith A. Reynolds, and Alicia S. Hunter

he National Summit on Legal Preparedness for Obesity Prevention and Control was conceived by the Centers for Disease Control and Prevention (CDC) as a strategic conference to review the current status of legal preparedness for obesity prevention and control, identify potential gaps, and develop specific action options for improving the contribution law can make to reduce the health threat posed by obesity. Working with the collaborating partners¹ and planning committe,2 the host committee3 planned and modeled after the Summit CDC's 2007 conference on public health emergency legal preparedness that resulted in the National Action Agenda for Public Health Emergency Legal Preparedness.⁴ The summit was a working meeting that offered invited participants a structured opportunity to deliberate about the laws and legal issues that impact obesity prevention and control from a public health perspective. The goal was to develop a viable tool that (1) defines the status of laws at various jurisdictional levels, (2) identifies significant legal gaps, and (3) lists law-related options that may be considered to reduce the public health threat of obesity.

This supplemental issue to the *Journal of Law*, *Medicine & Ethics (JLME)* contains three main sec-

tions representing the summit proceedings. Section 1, the introduction, contains a Foreword and two papers that provide an overview of the science and legal issues related to obesity prevention and control. Section 1 ends with a paper that discusses broadly, the government's role in obesity prevention and control. Section two assesses the current status of legal preparedness to address obesity prevention and control. Section 2 describes "status" in terms of assessing four core elements of legal preparedness⁵: (1) current laws and legal authorities; (2) the current skills public health practitioners and legal professionals possess to use laws and legal authorities effectively; (3) our ability to coordinate between sectors and jurisdictions to promote efficiency; and (4) the presence of, and our ability to share information about public health law best practices. Section 3 uses the four core elements to identify strategies and action options that could be adopted by various sectors and jurisdictions to prevent and control obesity.

The summit was planned by a committee comprising 71 individuals representing federal, state, and local governments as well as academic, philanthropic, nongovernmental, private sector, community-based, school-based, and public health institutions. These

Donald E. Benken, J.D., M.P.H., is a senior public health analyst in the Public Health Law Program at the Centers for Disease Control and Prevention (CDC). His portfolio includes legal preparedness for chronic disease and emergency response. He is a 19-year veteran of the agency and has made significant contributions to the CDC mission. He earned a M.P.H. degree from the University of Alabama in Birmingham, AL and a J.D. degree from the College of Law at Georgia State University, and is a member of the Georgia Bar. Meredith A. Reynolds, Ph.D., is Acting Team Lead for the Guidelines and Recommendations Team within the Obesity Branch of the Division of Nutrition, Physical Activity and Obesity, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion. Dr. Reynolds joined CDC as an Epidemic Intelligence Officer in 1999. She earned a Ph.D. from the University of Michigan, Ann Arbor, MI. Alicia S. Hunter, J.D., M.S.W., is Acting Team Lead for the Policy and Partnerships Team, Division of Nutrition, Physical Activity, and Obesity, Centers for Disease Control and Prevention. She joined the agency in 2000 after working with the Duke University Medical Center, Department of Social Work. She earned both the Juris Doctorate and the Master's of Social Work degrees from the University of North Carolina at Chapel Hill.

individuals were identified for their ability to reflect a broad group of individuals and organizations involved in obesity prevention and control and the effective use of law for those purposes. In November 2007, members of the planning committee met to identify and explore high-priority topics and issues to be addressed in the 2008 summit. Committee members met both as a large group and in small groups for more tailored discussion on physical activity, nutrition, and obesity. The committee also discussed the need to identify all the sectors critical to participation in the 2008 summit, including representatives from organizations and agencies in both the public and private sectors.

More than 230 persons participated in the summit, including elected state and local officials, attorneys, and practitioners from federal, state, tribal, and local government public health agencies; health care; legal practice; insurance; food manufacturing; academia; and representatives of philanthropic and professional organizations. Participants were organized into interactive workgroups, each of which focused on gaps, needs, and opportunities for specific actions related to one of the four core elements of public health legal preparedness. Discussion focused on laws and legal issues that impact, either directly or indirectly, nutrition, physical activity, and obesity. Further discussion emphasized specific action options that may be implemented in five specific intervention settings: medical care, schools, daycares, workplaces, and communities. The summit methodology ensured that each participant had multiple opportunities to contribute actively to the formation of the final work product. In addition to working sessions, several plenary sessions included nationally recognized leaders in public health, nutrition, physical activity, and law who work directly on obesity prevention and control.

The goal of the editors has been to produce an accurate record of the summit proceedings, while at the same time providing a practical tool for use by legislators, lawyers, public health practitioners, and their partners in their efforts to develop laws, policy, and programs that have a direct or indirect effect on reducing obesity. This supplement, which reports the proceedings of the 2008 National Summit on Legal Preparedness for Obesity Prevention and Control, represents the work product from the summit planning meeting and conference but is by no means intended to be the final result of this work. The action papers are intended to serve as a catalyst for future work. It will be incumbent upon senior policymakers and practitioners to consider implementing the action options described in this supplement in a manner that is appropriate for their specific setting, jurisdiction, sector, agency, or organization before the true fruits of this endeavor will be realized. The papers printed in Sections 2 and 3 of this JLME supplement are the collective work of authors who are multidisciplinary experts in law and obesity prevention and control. They were specifically invited by the CDC to serve as authors because of their ability to contribute to the final product and weave in the perspectives of the Summit participants following the conference deliberations. The papers in Sections 2 and 3 are the work product of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention or the organizations with which the authors are affiliated. The appendixes include a table summarizing selected summit action options, as identified by the action papers, organized by topic, setting, and jurisdiction; a roster of the summit planning committee; a list of summit participants and summit collaborating organizations; a table of obesity-related resources; and a bibliography of legal resources related to obesity prevention and control.

The realization of this conference and the publication of this proceedings document benefitted from the intense dedication of the summit planning committee and of the distinguished authors, invited participants, speakers, presenters, facilitators, small group reporters, and the editing team. In particular, we thank William H. Dietz, M.D., Ph.D., Director, CDC's Division of Nutrition, Physical Activity, and Obesity; Janet Collins, Ph.D., Director, CDC's National Center for Chronic Disease Prevention and Health Promotion; George A. Mensah, M.D., Associate Director for Medical Affairs, CDC's National Center for Chronic Disease Prevention and Health Promotion; Anthony Moulton, Ph.D., and Richard Goodman, M.D., J.D., M.P.H., Co-Directors of the CDC's Public Health Law Program; and the staff of the Division of Nutrition, Physical Activity, and Obesity, and of the CDC's Public Health Law Program. The dedication and many contributions of all these persons and organizations ensured the success of the summit and the development of this proceedings document toward the goal of improving legal preparedness as it relates to obesity prevention and control.

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- 1. Please see "Collaborating Organizations," in Appendix.
- 2. Please see "Planning Committee," in Appendix.
- 3. Please see "Host Committe," in Appendix.
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Legal Preparedness for Obesity Prevention and Control

FOREWORD

George A. Mensah

common theme throughout the greatest public health achievements of the 20th century is the importance of law. From the seminal successes in immunizations and motor vehicle safety to the recognition and control of tobacco as a health hazard, laws have been invaluable. More recently in this century, laws have been fundamental in public health preparedness to address environmental disasters and terrorist threats. In fact, the first National Summit on Legal Preparedness in 2007 focused on these "urgent threats." It only seemed natural that the second summit would focus on the "urgent realities" posed by the continuing epidemic of obesity — an epidemic that directly attacks our children's health and drains our nation's wealth.

Recognized worldwide as an energy imbalance resulting from excess caloric intake and reduced energy expenditure, obesity contributes to diabetes, heart disease, other multiple chronic diseases, impaired quality of life, and premature mortality. Data from the National Health and Nutrition Examination Survey (NHANES)1 show that more than one-third of U.S. adults, including 33% of men and 35% of women, were obese in 2005-2006. The NHANES data also show that 16.3% of children and adolescents aged 2-19 years were obese in the combined years of 2003-2006. A series of state maps derived from the Behavioral Risk Factor Surveillance System² demonstrates graphically the rapid increase in obesity on a state by state basis between 1985 and 2007.

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Obesity is also costly. One recent estimate suggested that health costs incurred by the obese were 37% higher than costs for those with normal weight in 2001, and that spending on obese persons accounted for 27% of the growth in inflation-adjusted per capita health care spending between 1987 and 2001.3 Addressing this huge burden of mortality, morbidity, and costs associated with obesity will take the concerted efforts of parents, pediatricians, other health care providers, policymakers, public health practitioners, city and urban planners, the food and beverage industry, and a wide array of stakeholders from multiple diverse sectors. Importantly, it will also require a carefully constructed supportive legal framework. But is public health prepared for this challenge? Few will doubt that many gaps exist in our legal preparedness to address obesity as a public health problem that requires sustained policy, environmental, and collective behavioral change in multiple settings, not just individual change.

In an effort to fill these gaps, this second summit was convened in June 2008 by the CDC, the Robert Wood Johnson Foundation, and the American Society for Law, Medicine & Ethics. Ten other national organizations joined as convening partners. They included the 9 "collaborating organizations" listed in the Program Book plus Public Health Law and Policy. The overall objectives of this summit were to assess the current state of legal preparedness for obesity prevention and explore opportunities for addressing identified gaps and developing actionable options that address all four core elements of public health legal preparedness. These core elements include the following: (1) laws and legal authorities; (2) competency in using laws effectively and wisely; (3) coordination of legally based interventions across jurisdictions and

sectors; and (4) information on public health laws and best practices.

This summit is, however, not in isolation. It complements our sustained public health preparedness and response that embraces legal frameworks as one of multiple strategies for achieving health impact. As part of this strategy, CDC is pursuing the identification of public health law interventions that can be leveraged to create policy and environmental changes. Prior efforts in 2004 identified the four core elements that underpin the legal framework for preventing and controlling chronic diseases.4 In 2007, CDC hosted the Public Health Grand Rounds program "Cutting-Edge Legal Preparedness for Chronic Disease Prevention" to (1) demonstrate the feasibility of applying these laws to address chronic diseases in the 21st century, and (2) to illustrate the practical relevance of legal preparedness as practiced from a State and local perspective.

The four pairs of assessment and action papers stemming from this summit provide a much-needed impetus in the overall commitment to the prevention and control of obesity. The gap analysis and options for future action which were identified as part of the summit will be invaluable in this endeavor. It is reassuring to know that tackling obesity is specifically mentioned in President Obama's American Reinvestment and Recovery Plan.⁵ There can be no better time than now to ensure that public health and its partners are fully prepared to take on the huge burden of obesity as an important strategy for preventing and controlling chronic diseases.

Note

The findings and conclusions in this foreword are those of the author and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

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- The Whitehouse, The American Reinvestment and Recovery Plan - By the Numbers, available at http://www.white-house.gov/assets/Documents/recovery_plan_metrics_report.pdf?hpid=topnews (last visited March 6, 2009).

Legal Preparedness for Obesity Prevention and Control: The Public Health Framework for Action

William H. Dietz and Alicia S. Hunter

he Centers for Disease Control and Prevention (CDC) has focused its obesity prevention and control efforts on improving population-level health. A recent Institute of Medicine report identified systems that affect population health, to include health care delivery systems, schools, businesses and employers, communities, and governmental public health infrastructure.1 CDC uses the public health model to engage these systems, and this process coordinates multiple settings, sectors, and jurisdictions to develop an integrated approach to identify, prevent, and control obesity. The public health approach goes beyond medical care to prioritize policy and environmental strategies that can be implemented across jurisdictional levels, in collaboration with traditional and nontraditional partners. The process ultimately produces tools, guidelines, and interventions that can be used to prevent and control obesity. In this manuscript, we provide an overview of the public health perspective on obesity, outline the public health framework for addressing obesity, and discuss the rationale for leveraging law-based efforts as a tool to accomplish the public health mission.

The Prevalence and Consequences of Obesity

Obesity is defined in adults as a body mass index
(BMI) ≥30, and in children and adolescents (ages 2–19
years) as a BMI ≥95th percentile for age and gender.
The BMI (weight in kg/height in meters²) provides a
measure of weight that is adjusted for height. Obesity
has become one of the most prevalent diseases in the

United States. Over 34% of adults² and 16% of children and adolescents are obese.³

Numerous adverse effects of obesity occur in adults and children. Obesity increases the risk of several cancers, type 2 diabetes mellitus, and cardiovascular disease (CVD).⁹ Among obese 5–17-year-old children, over 70% have at least one additional risk factor for CVD, and almost 40% have two or more.¹⁰ Estimates suggest that obesity accounted for more than 25% of the increase in per capita medical costs between 1987 and 2001.¹¹ Obesity also appears to be associated with a variety of adverse social effects. Among women, for example, data show lower rates of marriage, reduced household income, and lower rates of graduation from college,¹² which are likely a consequence of our culture's stigmatization and the consequent discrimination directed at obese women.

Notwithstanding United States appears to be making progress in the prevention and control of obesity. In recent years, no significant increase in obesity prevalence occurred among women between 1999 through 2006,⁴ or among children and adolescents between 2003-2004 and 2005-2006.⁵ The plateau in prevalence for children and adolescents is supported by CDC's Youth Risk Behavior Survey, which found no significant increase in obesity prevalence among high school students between 2005 and 2007.⁶ State data from Arkansas⁷ and Texas⁸ also support these findings.

The origin of the plateau in rates remains uncertain. However, CDC notes that greater public aware-

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ness resulting from press and media attention to the problem likely contributed to the present leveling of obesity rates. Obesity-related media coverage more than tripled between 2000 and 2004.¹³ The effect of media coverage in decreasing risk behaviors was notably observed during the tobacco control movement.¹⁴ Similarly, it is plausible that increased awareness of the adverse health effects of obesity may have prompted changes in physical activity and dietary practices resulting in a plateau in rates among some population groups. As with efforts to control tobacco use, successful reduction in obesity prevalence will require environmental and policy changes that foster improved nutritional choices, reduced inactivity, and increased physical activity.

The Public Health Framework for Addressing Obesity

The CDC targets six areas that can contribute to the prevention and control of obesity. These areas are the focus of obesity prevention and control efforts because the best available evidence suggests that population-level changes in these areas may have a positive impact on adult and childhood obesity rates. In fact, promising legislative, regulatory, or policy strategies have already begun to address these areas. The six targets are:

- Increasing physical activity;
- Increasing breastfeeding;
- Increasing fruit and vegetable intake;
- Reducing consumption of high-energy density (kcal/gm) foods;
- Reducing consumption of sugar-sweetened beverages; and
- Reducing television time.

Increasing Physical Activity

Although the level of physical activity necessary to prevent obesity is uncertain, it is clear that physical activity improves a number of obesity-associated co-morbidities, such as glucose intolerance, hyperlipidemia, and elevated blood pressure.15 The U.S. Department of Health and Human Services (HHS) recently released the first *Physical Activity Guidelines* for Americans. These guidelines address the types and amounts of physical activity that provide substantial health benefits for Americans aged 6 years and older.¹⁶ For adults, the guidelines recommend engaging in 150 minutes of moderate-intensity physical activity or its equivalent each week. For children and adolescents aged 6-17 years, the guidelines recommend 1 hour of daily activity that is mostly aerobic, but should also include muscle-strengthening and bone-strengthening activities.

CDC's Task Force for Community Preventive Services also has recommended a number of evidence-based strategies that increase physical activity, such as point-of-decision prompts for stairwell use (versus taking an elevator), school-based physical education programs, and improvements in community design. ¹⁷ Implementation of each of these strategies requires an environmental or policy change.

Increasing Breastfeeding

A report from the Agency for Healthcare Quality and Research has summarized research that demonstrated an association between breastfeeding and reduced risk of early childhood obesity. CDC's *Guide to Breastfeeding Interventions*, is designed to increase the rates and duration of breastfeeding. Among the strategies CDC recommends are changing hospital policies that reduce early and sustained contact between mothers and infants after delivery, provide infant formula rather than promote breastfeeding, or discharge mothers without lactation counseling or support.

Increasing Fresh Fruit and Vegetable Intake

A growing body of data suggests that energy density — i.e., the number of calories a food has per unit of volume or weight — may play a key role in weight regulation. Intake of low energy-density foods, like fresh fruits and vegetables, which have fewer calories because of their high water content, increases satiety and may improve weight control.²⁰ For example, 16 grapes may contain the same number of calories as 16 raisins, but are more filling because of their increased volume. Therefore, increased intake of fruits and vegetables may help prevent obesity.

One strategy to increase fruit and vegetable intake is to increase their availability. For example, the creation of farmers' markets and community gardens in a low-income African-American neighborhood in Charlotte, North Carolina, was associated with an increase in fruit and vegetable intake.²¹ In 2003, an innovative program implemented by Kaiser Permanente in northern California led to the establishment of more than 25 local farmers' markets at Kaiser clinics.²² Kaiser also began purchasing fresh fruits for use in its commissaries. As a result, this partnership supports local farmers and makes fresh fruits and vegetables available to patients and staff.

Reducing the Intake of High Energy Density Foods
The corollary of the observation that the reduction of
low energy density foods are more filling and therefore
less likely to lead to overconsumption is that the consumption of high energy density foods is more likely
to lead to overconsumption of calories. One effort that

appears promising in the control of consumption of high energy density foods is menu labeling. A recent study found reduced intake of calories among consumers who bought food at a chain of stores that provided information on the caloric content of their products.²³ To address the obesity epidemic, and to provide consumers with more information, the Board of Health of New York City adopted a regulation requiring certain restaurants to label menu items.²⁴

Reducing Consumption of Sugar-Sweetened Beverages Sugar-sweetened beverages account for a substantial proportion of caloric intake, especially among children and adolescents. For example, among 2-19-year-old youth who consume them, sugar-sweetened beverages account for 11%-16% of daily caloric intake.25 A recent agreement between the Alliance for a Healthier Generation (a partnership of the William J. Clinton Foundation and the American Heart Association) and soft drink companies limited the beverages available in vending machines in participating elementary schools to water, 8 oz of juice without added sweeteners, and fat-free and low-fat milks. The same standards applied to participating middle schools, but portion size was increased to 10 oz of juice without added sweeteners. In participating high schools, offerings were limited to no- and low-calorie drinks, light juices, and sports drinks, but the standards required that 50% of the drinks offered must be no- or low-calorie, with no more than 100 Kcal/container.26

Reducing Television Viewing

Television viewing has been associated with the consumption of foods advertised on television, which are generally foods of low nutritional value. Television programs in which children are at least 50% of the intended audience account for half of the food advertisement exposure for children ages 2 to 11.²⁷ Estimates suggest that over 40% of children younger than 2 years watch TV daily, and 36% of all children 6 years and younger have a TV in their bedroom. The percentage of those with a TV in their bedroom increases with age.²⁸ Research suggests that these factors may account for the association of television viewing with obesity in children and adolescents.²⁹

Rationale for Leveraging Law-Based Efforts to Accomplish Public Health Goals

Approaches to Policy

Enactment of any policy directed at a single target area is unlikely to have a major impact on obesity. For that reason, and to maximize impact on multiple population groups and across the lifespan, CDC urges the adoption of comprehensive policies that coordinate action across the target areas and can be implemented in a variety of settings. Below are examples of policy and environmental strategies that have been implemented in medical, child care, school, workplace, and community settings.

Medical Care

Several recent policies addressing target areas in the medical setting emphasize the potential impact that such policy and environmental strategies can have on the assessment and treatment of obesity. For example, lack of reimbursement for obesity care poses a major disincentive for medical providers to treat obesity or provide preventive counseling. Since 2004, treatment of obesity has been facilitated by the decision of the Centers for Medicare and Medicaid Services to remove from Medicare regulations any statements that obesity is not an illness.30 This change in language permits consideration, on a case-by-case basis, of reimbursement for obesity treatments that are supported by scientific evidence. In 2005, BlueCross BlueShield of North Carolina implemented policies that provide six nutrition visits per year as a standard benefit and authorize four medical visits per year for weight assessment and weight-loss care.31 In June, 2008, the National Center for Quality Assurance announced new reporting policies for the Healthcare Effectiveness Data and Information Set (HEDIS) that require medical plans to report annually the frequency with which BMI is recorded for adults and children, and the frequency with which nutrition and physical activity counseling is provided to children and adolescents.³²

$Child\ Care^{33}$

Obesity rates among children and adolescents have raised two questions: When is it appropriate to intervene to prevent or control childhood obesity? And through what mechanism and setting is this best done? In 2007, the New York City Department of Health and Mental Hygiene introduced a new regulation for group daycare centers. Because it incorporates many of the target areas, this regulation holds promise for addressing childhood obesity.³⁴ The policy specifies that in group daycare, children younger than 2 years old should not watch television, and television viewing for children over the age of 2 years must be limited to 60 minutes/day of educational television or televised programs that promote physical activity. The policy also requires that group daycare centers provide 60 minutes/day of physical activity, eliminate sugarsweetened beverages, and provide 1% or non-fat milk. Because the regulation addresses multiple behaviors in a setting where young children spend substantial

amounts of their waking hours, this regulation may contribute to the reduction or prevention of obesity.

Schools

According to CDC's School Health Programs and Policies Survey data³⁵ from 2000 and 2006, many school districts instituted a variety of policies affecting the sale of food products during and after school hours. These policies established standards for competitive foods sold during and after school hours, and called for increasing the provision of low-fat milks and reduced-fat yogurts, as well as reducing access to high-fat baked goods and snacks.

In Pinellas County, Florida, the licensing board overseeing daycare and after-school care programs set as a condition of licensure the provision of a minimum of 30 minutes of physical activity, 5 days/week.³⁶ In 2008, the state of Florida passed a law requiring each school district to provide 150 minutes/week of physical education for students in grades K-5, and for students in the 6th grade when the school has one or more elementary grades. Beginning in 2009, school districts will have to expand the physical education requirement so that students in grades 6-8 receive 1 physical education class/day each semester.³⁷ As a result, many children in Pinellas County now meet the national guideline of 60 minutes of daily physical activity.

Workplace

Several years ago, CDC recognized that it could serve as a model worksite by implementing and evaluating policy and environmental changes that improved nutrition and physical activity for its employees.³⁸ These efforts included projects to increase stairwell usage, physical activity, and fruit and vegetable intake, promote breastfeeding, and provide healthy foods at meetings. Outcomes included the following:

- Demonstration that the promotion of stairwell use increased stair use³⁹ led to a CDC policy that all new CDC buildings would have central and attractive stairwells.
- New fitness facilities and lactation rooms were built or provided at a number of CDC campuses.
- A General Services Administration contract for CDC's main employee cafeterias was renegotiated to include healthier options.
- Weekly fruit and vegetable markets were provided on each of CDC's major campuses.

Community

A growing number of communities around the country have initiated efforts to prevent or control obesity.

For example, the city of Somerville, Massachusetts implemented the "Shape-Up Somerville" program that addressed multiple target areas in multiple settings.40 This program targeted public school students in grades 1-3 and included a variety of before, during, and after school-based interventions, and incorporated home- and community-based interventions, such as increases in low energy-density/high nutritional-value foods, reductions in high caloric-density foods, implementation of school wellness policies, and enhanced school food services. In addition, the program expanded pedestrian safety policies, instituted a walk-to-school campaign, and provided city employees with a fitness benefit. These efforts were accompanied by training in obesity prevention and control for local physicians. Although the program did not demonstrate a decrease in the prevalence of overweight among youth, significantly slower increases in BMI occurred in the targeted schools compared with control populations.

Summary

The activities outlined above represent early efforts to address policy and environmental change to prevent or control obesity. Many of these efforts are promising, but few have been subjected to careful evaluation to assess their impact. Legal and regulatory frameworks offer additional opportunities for sustainable policy and environmental changes to improve nutrition and physical activity, and thereby prevent and reduce obesity. The development of policies to address environments that promote obesity, and the evaluation of the impact of such policies, must become a high priority for building the evidence base for obesity prevention and control. Public health law — i.e., the laws and legal authorities that govern the assessment, application, and evaluation of law-based efforts to address a public health issue — is a useful framework to develop and implement policy and environmental strategies that will later contribute to the pool of evidence-based and promising best practices. The identification of best practices involves not only identifying the practice, but also assessing the effect of its implementation. As a noted authority on the design of interventions has stated, "To obtain more evidence-based practice, we need more practice-based evidence."41

Note

The findings and conclusions in this report are those of the authors and do not necessarily represent the views of the CDC.

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Legal Preparedness for Obesity Prevention and Control: A Framework for Action

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Introduction
Purpose
The Proceedings of the National Summit on Legal
Preparedness for Obesity Prevention and Control is
based on a two-part conceptual framework composed
of public health and legal perspectives. The public
health perspective comprises the six target areas and
intervention settings that are the focus of the obesity
prevention and control efforts of the Centers for Disease Control and Prevention (CDC).¹

This paper presents the legal perspective. Legal preparedness in public health is the underpinning of the framework for the four "assessment" papers and the four "action" papers that are integral to the application of public health law to any particular health issue. In addition, this paper gives real-world grounding to the legal framework through examples that illustrate the four core elements of legal preparedness in public health that are at work in obesity prevention and control.

Law in Public Health

Law, a traditional and indispensable public health tool, made important contributions to all 10 "great public health achievements" in the United States during the 20th century. These achievements include control of infectious diseases, motor vehicle safety, and a decline in deaths attributed to coronary heart disease and stroke.²

At a fundamental level, law operates as a public health tool by establishing public health agencies and programs focused on preventing disease and promoting health. The Public Health Service Act, for example, authorizes many federal public health agencies and programs.³ States and many tribes and localities have enacted similar authorities. Laws also can support public health interventions directly, such as through tobacco excise taxes, rules requiring restaurants to label menu items with calorie information, and school immunization requirements.

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Public health laws are rooted in the U.S. Constitution and state constitutions, in statutes enacted by legislative bodies and regulations adopted by executive branch agencies, in municipal ordinances, in policies promulgated by government bodies such as boards of education and planning commissions, and in judicial rulings.

Defined most broadly, public health laws include any law that has important consequences for the health of populations. They encompass laws that focus explicitly on prevention and health promotion as well as laws that are adopted for other purposes but that nonetheless influence the public's health. As policy-makers intensify their search for tools to address the nation's mounting chronic disease burden — including the burden caused by obesity — they are giving active attention to laws that indirectly influence public health (e.g., zoning and land use regulations) and laws that shape transportation systems and opportunities for physical activity.

Conceptual Framework for Public Health Legal Preparedness

The concept of legal preparedness in public health encompasses the multifaceted role law plays in public health and is applicable across all the domains of public health such as chronic and infectious disease, injury, emergency preparedness, and environmental health.

Public health legal preparedness was defined in 2003 as "the attainment by a public health system... of specified legal benchmarks or standards essential to the preparedness of that system" to address specific public health threats such as those posed by the obesity epidemic.⁴ Public health legal preparedness has four core elements:

1. Laws and Legal Authorities

Laws are foundational to public health legal preparedness, including legal preparedness for obesity prevention and control, because they define the authority of government bodies and specify rights and responsibilities of private parties.

2. Competency of Public Health Professionals to Apply Laws and Legal Authorities

Laws are not self-enforcing; therefore, public health policymakers and professionals and their counterparts in relevant sectors need to understand their legal authorities, how to apply them effectively, and how to shape necessary new laws and implementation tools.

3. Coordination of Legal-Based Interventions across Jurisdictions and Sectors

Effective design and implementation of most legal interventions require close coordination across sectors (e.g., public health and land use agencies) and across jurisdictions (e.g., state, tribal, local, and federal governments).

4. Information on Public Health Law Best Practices

Policymakers and public health practitioners in many sectors and jurisdictions need up-to-date information on public health law best practices that reflect scientific knowledge and accepted legal principles in use of legal interventions.

These core elements were the organizing framework for the 2007 National Action Agenda for Public Health Emergency Legal Preparedness,⁵ which focused on public health emergencies. They, along with the setting- and target-specific focus detailed in the accompanying public health framework paper, guided the deliberations of the 2008 National Summit on Legal Preparedness for Obesity Prevention and Control.

Law as a Tool for Chronic Disease Prevention

Policymakers, public health professionals, advocacy groups, and researchers increasingly recognize law as a valuable tool for the prevention of chronic diseases and of obesity in particular. Much of the heightened policy-making activity pertinent to obesity prevention is reported in the four assessment papers included in the proceedings of the 2008 National Summit on Legal Preparedness for Obesity Prevention and Control as well as in the monthly CDC Public Health Law News (http://www.cdc.gov/phlp), the Robert Wood Johnson Foundation's periodical News Digest - Childhood Obesity (http://www.rwjf.org), publications of the National Conference of State Legislatures (http://www.ncsl.org), and resources developed by many other stakeholders in obesity prevention and control.

Researchers have illuminated the role law can play in preventing chronic diseases and obesity in a growing body of published work.⁶ Research on the impact of public health laws is strengthening the scientific basis for that role. Notable, in this context, is a systematic review by the CDC-sponsored Task Force on Community Preventive Services. The Task Force concluded that law-based urban design and land use policies are effective tools to encourage physical activity and address obesity.⁷

A two-part 2004 article, "Law as a Tool for Preventing Chronic Diseases: Expanding the Range of Effective Public Health Strategies," articulates CDC's commitment to take a systematic approach to identifying legal tools for chronic disease prevention and to strengthening the capacity of its National Center for Chronic Disease Prevention and Health Promotion to apply those tools directly and through its many partners. The 2008 national summit and the resulting white papers are a direct outgrowth of that commitment.

Application of Core Elements to Obesity Prevention and Control

In shaping and applying law and legal tools to obesity prevention and control, policymakers and practitioners in public health and related sectors can use the framework of the four core elements: laws and legal authorities, competency in applying laws and legal authorities, coordination across multiple sectors and jurisdictions, and information on public health law best practices. The examples presented here reflect recent innovations relevant to many of the target areas and settings in which CDC focuses its obesity prevention efforts. Many of these examples are mentioned in the assessment and action papers from the 2008 national summit.

Laws and Legal Authorities

In recent years, many jurisdictions have adopted new laws aimed at the twin goals of preventing obesity and assisting obese people to engage in important life functions. This section describes relevant laws to nutrition, physical activity, and obesity prevention and control in the priority intervention settings and in the crosscutting dimension of discrimination experiences of people who are obese.

School and Daycare Settings

Several states and municipalities have adopted laws to regulate the nutritional value of food available to students and to children in child care programs. Kentucky enacted legislation in 2005, for example, to limit beverages available in schools to water, 100 percent juice drinks, low-fat milk, and beverages with no more than 10 grams of sugar per serving. In 2006, Indiana enacted legislation requiring that food sold in schools must meet specified standards and that all elementary schools provide daily physical activity. By June 2008, a total of 25 states had established nutritional standards for "competitive foods" — foods and beverages available in schools but not approved for reimbursement under the National School Lunch

Program.¹¹ Restrictions in 27 states on sale of competitive foods were more stringent than federal requirements, and 18 states had stricter nutritional standards for school meals than those required by the U.S. Department of Agriculture.¹² Local governments, too, have been active in this area. In 2006, for example, the New York City Board of Health adopted new requirements for the nutritional value of food and beverages served in group day care facilities licensed by the agency.¹³

State and local health departments, along with school boards, have mandated physical activity in schools and child care settings and have set limits on television viewing. As of 2006, nine states had capped television viewing time in child care settings.14 Among the relevant provisions enacted in 2007 by the Mississippi legislature was the Healthy Students Act which set minimum standards for physical activity and health education for students in grades K-12.15 In January 2007, New York City's Department of Health and Mental Hygiene implemented a Board of Health rule mandating that day care services provide at least 60 minutes of specified types of daily physical activity; proscribed television, video, and "other visual recordings" for children younger than 2 years of age; restricted viewing to 60 minutes daily for older children; and limited viewing to "educational programs or programs that actively engage child movement."16 Additional requirements were approved in September 2008 for outdoor activity and play equipment.17

• Community Setting

Cities are using zoning and land use laws to improve neighborhoods' access to affordable healthy foods and limit access to high-calorie foods and beverages. In July 2008, the Los Angeles City Council, as part of a plan to encourage grocery stores to locate in underserved neighborhoods, approved a one-year moratorium on new fast-food restaurants in South Los Angeles where 30 percent of all children were found to be obese.18 Several other cities in California, Rhode Island, and Massachusetts have used zoning authorities to exclude fast-food restaurants from designated neighborhoods;19 the city of Detroit, Michigan, has prohibited location of fast-food restaurants closer than 500 feet to schools.20 In September 2008, California became the first state to require chain restaurants to post the calorie content of menu items; once the law is fully implemented, more than 17,000 restaurants are expected to be covered.²¹

As of July 2004, 17 states and the District of Columbia had enacted taxes on foods with low nutritional value.²² No other states adopted such taxes in the next four years, apparently reflecting controversy over their effectiveness, their impact on the poor, general aversion to increased taxes, and related factors. In 2008, Maine voters even repealed new taxes on soft drinks, beer, and wine that had been enacted by the state legislature and approved by the governor.²³

Medical Care Setting

Several states include incentives for prevention and control in obesity in Medicaid programs, either through legislation or agency regulation. As of mid-2008, researchers concluded that 11 states showed "strong evidence that they provide reimbursement for nutritional and behavioral therapy to children with overweight and obesity" in Medicaid programs. ²⁴ In eight states, Medicaid programs covered three types of obesity treatment: assessment and consultation, drug therapy, and bariatric surgery. ²⁵

Workplace Setting

Mothers who wish to continue breastfeeding after returning to work often face significant barriers. As of June 2008, 21 states, the District of Columbia, and Puerto Rico had enacted legislation requiring employers to offer some accommodation for breast feeding. ²⁶ Among the most recent of such measures is Indiana's legislation that requires state agencies, political subdivisions, and organizations with 25 or more employees to provide employees, where reasonable, paid breaks to express breast milk, a private place to use breast pump equipment, and refrigeration for storing expressed milk. ²⁷

A number of states have enacted legislation creating incentives to offer or enroll in wellness programs. In 2007, Indiana enacted a tax credit to give small businesses incentives to provide employees state-certified wellness or health promotion programs that include services to encourage weight loss.28 By mid-2008, 51 small businesses with a total of 2,500 employees had qualified for this incentive. At least three states — Florida, Michigan, and Vermont — have passed legislation to give rebates on insurance premiums to employers or employees who participate in wellness programs.²⁹ Several states require health insurance plans to include treatment for morbid obesity.³⁰ In 2006, new Indiana law required physicians who perform surgical treatment for morbid obesity to discuss with patients all possible complications and side effects in advance, to monitor patients for five

years after surgery, and to report any deaths, side effects, or major complications to the state health department.³¹

• Cross-Cutting: Discrimination

Discrimination in educational, health care, and workplace settings against people who are obese is a serious problem.³² Federal and state laws do not address the problem systematically. More attention has been given to this issue at the state and local levels. As of late 2008, laws designed to prevent discrimination against obese persons were adopted by one state (Michigan),³³ the District of Columbia,³⁴ and three municipalities (San Francisco and Santa Cruz, California, and Binghamton, New York),³⁵

Competency in Applying Law

The policymakers, practitioners, and legal counsel who shape and implement legal-based interventions for obesity need a broad understanding of effective public health interventions and of ways in which law can support them. Public health proponents should understand how the legal powers of urban planning, transportation, education, and other agencies can be used to address obesity. By the same token, professionals in those sectors should understand how the legal powers at their disposal can support obesity prevention in the community.

One critical competency is the skill to partner with diverse stakeholders to design and apply law-based strategies. Even an intervention as seemingly simple as limiting students' access to high-calorie and sugar-sweetened foods and beverages from vending machines may involve school administrators and board members, parent organizations and student councils, the local public health agency, the city or county executive officer or legislative body, community-based organizations, and local businesses.

Three examples illustrate high-level competency in shaping and implementing law to support obesity prevention and control across multiple sectors.

• Focus on Nutrition in the Community Setting Today, Americans purchase an estimated one-half of all their meals outside of the home. However, although food consumed at home typically is labeled with nutritional information required by the federal Nutrition Labeling and Education Act (NLEA), restaurants and fast-food establishments have not been required to provide nutrition labeling of food on menus. Thus, customers are denied information critical to making healthier food choices. To address this problem, the New

York Department of Health and Mental Hygiene adopted a rule to require fast-food establishments serving standardized meals to post calorie information on the menus and menu boards. The authorizing health code, which requires restaurants to have permits from this city department, provided a vehicle to put the menu labeling rule into effect.

The Bureau of Chronic Disease took the first step by presenting the proposal to the Board of Health. Emphasizing that obesity is a risk factor for four of the five leading causes of death in New York City and that obesity is due mainly to excess calories consumed, increasingly outside of the home, scientists from the Bureau explained that giving customers information about calorie content likely would help prevent obesity. Among other information, the bureau used data showing that many customers pay attention to nutrition information posted in restaurants and purchase healthier meals as a result.

In December 2006, the Board of Health adopted a rule mandating calorie labeling and requiring any food service establishment that had voluntarily published calorie information to post the same information on menus and menu boards.³⁶ The state restaurant association challenged the rule in a lawsuit before it went into effect. In defense, the health department produced declarations attesting to the need for calorie labeling and worked with allies throughout the country who filed amicus curiae briefs. In September 2007, a federal court ruled that, to the extent that New York City's rule applied to restaurants that had voluntarily provided calorie information, it was preempted by the NLEA.³⁷ The decision, however, recognized the agency's general authority to mandate calorie labeling. Rather than appeal, agency legal counsel and senior leadership proposed that the board amend the code to exercise its authority to mandate calorie labeling, as outlined by the court. In January 2008, the board adopted a rule requiring restaurants belonging to chains with 15 or more restaurants nationally that sell menu items standardized for portion size and content to post the calorie content of meals on menus and menu boards.38 The restaurant industry brought a second lawsuit, but the board's rule was upheld in court and was implemented.³⁹ This case illustrates the impact a coalition across sectors composed of policymakers, public health professionals, legal counsel, and community advocates — can have when its members understand the relevant laws and how to use them effectively.

• Focus on Physical Activity in the Community Setting

Beginning in 2006, the health department of Contra Costa County, California, and the City of Richmond planning department made a commitment to incorporate into the city's new general plan goals to reduce risk factors for chronic diseases. (California state law mandates that every city and county adopt a "general plan" with which "virtually all land use regulations and approvals must conform.")40 High proficiency in technical and collaborative competencies led to identification of eight consensus goals. Two of these goals were the following: (1) to "[e]nsure that the city has an extensive system of parks, playgrounds and open space" (e.g., that 75 percent of city households live within one-quarter mile of an "active community park or open space") and (2) to "[p]romote jointuse projects and programs in collaboration with the School District."41 The technical competency of public health professionals in gathering local epidemiological data about obesity, physical activity, and injury was invaluable to the city planners, who found the data added credibility to their proposals to elected officials. (Data on injury was included because automobile collisions with pedestrians and bicycles had discouraged physical activity.) The planners' technical competency in their discipline was equally valuable to the public health advocates. Also important were the collaborative skills the involved public health and planning professionals had acquired through engagement in earlier projects and activities. As a result of this successful collaboration, the elected Richmond City Council anticipates adopting the new general plan, including its explicit goals to expand opportunities for physical activity and improve access to healthy food and nutrition.

Coordination in Implementing Legal-Based Interventions

Effective coordination across sectors and jurisdictions is critical for virtually all public health interventions. Public health practitioners routinely interact with a host of partners as they monitor community health trends, lead programs for community health education, investigate disease outbreaks, and conduct a host of other activities.

The vital role of coordination was underscored during investigation of the 2001 anthrax attacks and of the many subsequent "white powder" incidents. The authority of public health officials to collect samples and the authority of law enforcement officials to seize evidence and maintain a secure chain of custody for

potential criminal prosecution were not easily reconciled. This experience catalyzed development of new training curricula to improve coordinated implementation of law-based actions during public health emergencies across public health, law enforcement, and emergency management agencies.⁴²

Similar tools are needed to strengthen the capacity of public health agencies and their partners to design and implement coordinated, law-based interventions for obesity prevention and control. Two cases show that excellent examples of such coordination already exist in the community setting and offer models for broader adaptation.

• Focus on Nutrition in the Community Setting Pennsylvania's Fresh Food Financing Initiative is notable because it has achieved successful coordination across levels of government and across the public and private sectors, including private investors.

Residents of many low-income, inner-city communities must buy their food from neighborhood convenience stores that typically sell packaged, high-calorie foods at relatively high prices. Supermarkets generally offer a broader range of affordable and nutritionally sound food, but many supermarkets have found it difficult to succeed in these neighborhoods. A national 1995 study found this problem to be especially acute in Philadelphia where high-income neighborhoods were served by 156 percent more supermarkets than were the lowest-income neighborhoods.⁴³

To address this problem, Philadelphia's nonprofit Food Trust conducted research in coordination with the city's public health department and the University of Pennsylvania and, in a 2001 report, called for location of more supermarkets in low-income neighborhoods. A task force, co-chaired by a supermarket executive and the chief executive officer of the United Way of Southeastern Pennsylvania, issued policy recommendations and stimulated action by the city council and state legislators representing Philadelphia and other cities.

In 2004, Pennsylvania appropriated funds to support the newly created Fresh Food Financing Initiative, a coordinated initiative of the Food Trust; the Reinvestment Fund, a community development bank that mobilizes private investment through state-authorized tax credits, and the Greater Philadelphia Urban Affairs Coalition, a nonprofit, public-private, community-based organization. By mid-2008, the cross-sector initiative had provided financial incentives for 52 new super-

market projects in low-income neighborhoods of Philadelphia, Pittsburgh, and other cities.⁴⁴

• Focus on Physical Activity in the Community Setting

The movement for safe routes to school illustrates sophisticated coordination in developing lawbased interventions to encourage physical activity. Catalyzed by grass-roots initiatives, states and the federal government has adopted laws that authorize program for safe routes to schools, establish multisector advisory committees, and provide funding for sidewalks, bicycle paths, pedestrian and traffic signals, and crosswalks. California adopted legislation to allocate state transportation funds for local safe routes to school construction projects as early as 1999.45 A 2004 Colorado statute requires the state transportation department to establish a program for safe routes to school and gives funding priority to local projects endorsed by "school-based associations, traffic engineers, elected officials, law enforcement agencies, and school officials."46

Federal participation began with creation of the Safe Routes to School Program in the Federal Highway Administration through the 2005 legislation reauthorizing the Federal Transportation Act.47 The act authorized \$612 million in grants to state programs for safe routes to school, which were the first federal funds for this purpose. In addition, the act required appointment of a task force with membership representing three sectors typically involved in local and state activities related to safe routes to school: health, transportation, and education. The members of the task force appointed in 2007 represented an even broader spectrum of collaboration, including public health, health care, education, transportation and highway safety, mass transit, law enforcement, local elected officials, state and local organizations promoting safe routes to school, and advocacy organizations for walking and bicycling.48

Information on Public Health Law Best Practices
A practical way to capture the essence of this core element of legal preparedness is to ask the question, Do the policymakers and practitioners active in obesity prevention and control have ready access to the many types of information they need to make effective use of law and legal tools for that purpose?

The answer almost certainly is that they do not have this access. The information resources available to practitioners and policymakers active in tobacco control may be a benchmark for this core element. Research conducted over several decades has built a strong scientific basis for law-based tobacco control strategies and laws. An extensive network of public and private organizations translates this knowledge into information that can be readily used by government officials and public health advocates. CDC's Best Practices for Comprehensive Tobacco Control Programs presents empirically based recommendations for state and local legislative action, programs, and funding for tobacco control.⁴⁹ Technical assistance is available from nonprofit legal centers, professional societies, and organizations involved in the tobacco control movement such as the Campaign for Tobacco-Free Kids. Also, information on legal innovations and best practices is actively disseminated through tobacco control conferences, newsletters, and periodicals.

While not yet at the level attained by the tobacco control community, valuable information resources on law and obesity prevention and control have been developed for policymakers and more are in preparation. Selected examples include:

- The proceedings of the 2008 National Summit on Legal Preparedness for Obesity Prevention and Control is an important reference on the status of law as a tool supporting obesity prevention. Most important are the practical action options the action papers presented for consideration by policymakers and professionals throughout the country.
- A portfolio of technical assistance resources is being developed by legal researchers and analysts with support from the Robert Wood Johnson Foundation. Among these resources are model laws for menu labeling and nutritional requirements, model agreements for community groups' use of school facilities for physical activity, model contracts for school vending machines, and related fact sheets. 50 These resources will be disseminated nationally by the organization Public Health Law and Policy as were its existing products, "General Plans and Zoning: a Toolkit on Land Use and Health," and "How to Create and Implement Healthy General Plans." 52
- Information materials recently prepared by the National Center for Safe Routes to Schools exemplify the kind of rounded resources federal agencies, foundations, and other groups may consider developing for broader use in obesity prevention: a "toolkit," technical guidance, and information on key issues such as liability protection for local organizations that sponsor safe routes to school.⁵³
- The new analytic tool of health impact assessments (HIAs) gives policymakers and practitio-

ners access to valuable information about the consequences of many types of law on nutrition and physical activity. HIAs are prospective analyses of the impact specified policies and projects may have for the public's health. Several HIAs related to diverse initiatives, such as redevelopment of the Derby District of Commerce City, Colorado. In addition, a California ballot proposition to expand after-school programs would examine the impact of such programs on level of physical activity, among other health considerations. HIA toolkits are available from CDC and the School of Public Health, University of California at Los Angeles.

Application of Core Elements to Obesity Prevention and Control

The examples presented here are purely illustrative. Many more examples could be offered as evidence that public health proponents across the country are actively exploring and using law to address the obesity epidemic. These cases also make the point that the work underway focuses on each of the four core elements of public health legal preparedness. This consideration is important because a balanced strategy — one that strengthens all four elements — will yield the greatest health benefit. The simple adoption of laws, even those with documented efficacy, is unlikely to be beneficial if the concerned officials do not know how to apply them effectively, do not coordinate their efforts, and lack up-to-date information on best practices.

Against this backdrop, the four action papers in the proceedings of the 2008 National Summit on Legal Preparedness for Obesity Prevention and Control are a product of the first systematic attempt to identify practical options for legal preparedness for consideration by policymakers and practitioners working to prevent and control obesity. The action options presented in the white papers were discussed and refined during and after the summit. Each action paper focuses on one of the four core elements of public health legal preparedness and presents action options to address gaps highlighted in the corresponding assessment paper.

Structural public health interventions, which use law and other types of policy, shape the environment in which people live, creating society-wide conditions conducive to better health. In the domain of chronic disease prevention, statutes on smoke-free air and ordinances instituting fluoridation of drinking water exemplify this type of intervention, which works by making healthy living a default option.⁵⁸ The health benefits of these statutes have been documented extensively. The central purpose of the Summit pro-

ceedings is to give policymakers and practitioners practical, grounded information they can use to shape law-based interventions for the same purpose — and with similar success — in addressing the full spectrum of health threats posed by the obesity epidemic.

Note

The views expressed in this paper are those of the authors and do not necessarily reflect the policies or positions of the organizations with which they are affiliated.

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Legal Preparedness for Obesity Prevention and Control: The Structural Framework and the Role of Government

Demetrios L. Kouzoukas

his paper discusses the relationship between obesity, law, and public health preparedness as well as the relevant roles of public health practitioners, policymakers, and lawyers. Each group believes they have a unique role in this relationship although there can be overlap and/or lack of clarity as to what that role may be.

The role of the lawyer in the public policy process is to identify relevant legal issues, to analyze them and give advice on the risks of taking a given action, and to communicate legal advice in a clear manner. Simply put, the lawyer's role is to dive deep into the law surrounding the topic at hand and to offer advice regarding the permissible limits of policymakers' options and the associated risks.

In contrast, policymakers work with an infinite set of choices that have no clear and defined base of underlying, common reference points. Debates about issues can be discussed at length as multiple and very different perspectives are brought to bear. Instead of seeking in-depth understanding of the parameters set by the law, the policymaker explores a broad range of possible options and weighs them against a number of standards. Legal considerations are surely one of the most important; but the issue of practical feasibility is also critically important: can a policy under consideration garner and maintain support from the stakeholders who are critical to its adoption and implementation?

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The challenge of the National Summit on Legal Preparedness for Obesity Prevention and Control is to marry these two perspectives — that of the policymaker and that of legal counsel — in order to reduce obesity while paying homage to the principles underlying our system of laws and gaining support from the public.

The best way to tackle this challenge is to be guided by principles and fundamentals.

Our constitutional system of government has one feature of particular importance to the role of the federal government: enumerated powers. This principle speaks to the core element of public health legal preparedness, i.e., laws and legal authorities.

The doctrine of enumerated powers is clearly manifested in the Constitution and holds that the federal government has only the authorities that are granted to it by the people in the Constitution. In the language of the Tenth Amendment, "The powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people."

This guideline is uniquely important for federal government officials and their legal counsel. Lawyers in private practice do not ask what the legal authority is for their clients' action. Rather, they often seek to identify the extent to which a government agency has authority to require their client to take a certain action, that is, to regulate their client. In contrast, a lawyer who advises a federal agency has to start with a clear understanding of the legal authority that agency has and of the constitutional and other limits on that authority.

Here lies the genius of the constitutional founders. While Congress, over the years, has legislated broadly in many areas of public health, the fact remains that every action the federal government takes must be based on constitutionally articulated authority.

A corollary first principle is that of federalism. Many federal government actions — including many of those aimed at protecting the public's health — must be taken in concert with state and local governments. Federal policymakers often find it frustrating when they bump up against these limitations, yet policymaking gains in quality and feasibility when state, local, and federal agencies collaborate, each acting in its constitutionally defined realm. This interplay was the framers' intent.

The Constitution does not enumerate specific powers for the federal government in the domain of health. Of course the federal government is extremely active in health and plays a prominent role in public health, including the prevention and control of obesity. This role rests on two constitutional authorities: the commerce clause (Article I, Section 8 [3]), which empowers Congress to "regulate Commerce with foreign Nations, and among the several States, and with the Indian Tribes;" and the spending clause (Article I, Section 8 [1]) which authorizes Congress to "lay and collect taxes...and provide for the common Defense and general Welfare of the United States." Within that authority, Congress has assigned specific powers to HHS by statute and appropriates funds to implement them. HHS' main statutory authorities for public health stem from the Public Health Service Act, a law first enacted in 1912 with a very limited scope.² At that time, the act contained only two sections that occupied one half of one printed page. Today, its many subsequent amendments make it a two-inch-thick document.

With respect to legal authority for obesity prevention and control, HHS has — mostly within the Public Health Service Act — broad powers to monitor and report on trends in obesity and its health consequences, to conduct research on the causes of obesity, to educate the public and professionals, and to explore and support effective interventions. Many parts of HHS rely on these authorities to conduct obesity prevention initiatives. The National Institutes of Health conducts extensive research on the causes of and potential treatments for obesity. The Food and Drug Administration regulates food safety and nutritional claims. The Medicaid program provides obesity-related health services for low-income children and mothers. HHS' many projects to prevent obesity include the Surgeon General's "Healthy Youth for a Healthy Future" initiative, CDC's School Health Index, the "Together Raising Awareness for Indian Life" initiative led by the Indian Health Service, and the Head Start Playground Initiative led by the Administration for Children and Families.

Many other federal agencies also play significant roles in addressing obesity. The Department of Agriculture influences production of the Nation's food supply and also enhances nutrition through the School Lunch Program, the Food Stamp Program, and the Special Supplemental Nutrition Program for Women, Infants and Children (the WIC program). The Department of Education provides guidance to schools for student physical activity and nutrition. And the Department of Transportation importantly shapes the environment for physical activity through funding for highways, alternative modes of transit, and the Safe Routes to Schools program. As with HHS, these activities are conducted within the guiding principle of enumerated powers and as generally authorized by Congress under the spending power and commerce clauses.

A constant challenge policymakers face is deciding on the level of government that is best suited to take action addressing a specified problem. The division between the enumerated powers of the federal government and the powers of the states results in the U.S. system of federalism. State governments mirror the organization of the federal government with their own legislative, executive, and judicial branches, including administrative agencies that substantially parallel their federal counterparts. Many of these—for example, states' health and human services agencies—receive federal funds conditioned, in a variety of ways, on the states' compliance with given program and policy requirements.

Frequently, decision makers at both the federal and the state levels make coordinated contributions. One example is the financial incentives that several states have begun giving to encourage food stamp and WIC recipients to purchase vegetables and fruit. In contrast, the safe routes to schools movement is a grassroots initiative which began in the 1980s and 1990s and was supplemented by the federal Department of Transportation receiving Congressional approval to provide financial and technical assistance to state programs in 2005.³

Justice Louis Brandeis noted one of the most important benefits of our federal system in his famous dissent in the Supreme Court's 1932 New State Ice Co. v. Liebmann ruling when he wrote, "It is one of the happy incidents of the federal system that a single courageous state may, if its citizens choose, serve as a laboratory; and try novel social and economic experiments without risk to the rest of the country."

We are an innovative country, and federalism, as Brandeis noted, can stimulate such innovation. Justice Brandeis' observation should be an important precept for any exploration of alternative approaches to dealing with the obesity epidemic.

The doctrine of individual rights is another fundamental principle to keep in mind in developing strategies to address obesity as a health problem with societal implications. Elected officials, as well as public health professionals and advocates, frequently encounter the tension between individual rights and society's well-being. Smokers assert rights to smoke while non-smokers point to scientific evidence that there is no risk-free level of secondhand smoke exposure to assert their right to live, work, and play in smoke-free environments.⁵ Motorcycle riders advocate for repeal of mandatory helmet laws while research shows that repeal correlates with fatal or debilitating head injuries. 6 Restaurant operators have opposed mandatory publication of calorie content on menu boards as an infringement on their right to manage commercial speech.

This tension, in some sense, is likely always to be with us since there clearly is some degree of inherent conflict between many choices the community makes and the choice each individual might prefer for himself. When, in 1905, a Massachusetts resident refused to submit to mandatory smallpox vaccination, the Supreme Court ruled against the individual and specifically rejected the argument that mandatory vaccination violated the due process and equal protection clauses of the Fourteenth Amendment, supporting the state's use of its police powers to defend the community at large. The Court said, in part, that "[u]pon the principle of self-defense, of paramount necessity, a community has the right to protect itself against an epidemic of disease which threatens the safety of its members."7

However, regarding the present obesity epidemic, we have to ask whether there really is any similar legal and ethical basis for imposing, as some have advocated, public health interventions on the individual.

Whatever legal tools are used to help prevent and control obesity, they must be limited to those that afford individuals due process with respect to life, liberty, and property. While this restriction may not seem relevant on its face, it is both important and relevant. In this regard, three principles regarding the role of governments, at all levels, may especially help guide formulation of any action agenda:

• First, preventing obesity requires decisions about personal behavior that by definition can only be made by the individual. These are inherently personal decisions about what to eat and how much exercise and physical activity to engage in. It is inconceivable that elected officials in this

- country would attempt to enact laws compelling Americans to eat only certain types and amounts of food or to engage in specified types and levels of physical activity. The fundamental, constitutional principal of individual rights prevails, yet the action options should be framed to achieve population-level health outcomes while creating policy and environmental supports that encourage individual-level behavior change.
- Second, a corollary is that open, competitive markets are a collective expression of individuals' private choices. When government regulates what is offered in the market, it indirectly regulates citizens' range of choice. Further, regulation prevents private businesses from introducing new products and services into the marketplace that could fulfill the desire many Americans express for healthier food and more opportunities to engage in physical activity. Shaping actionable options must include a search for opportunities to stimulate the functioning of competitive market forces.
- Third, obesity is not like smoking. We cannot simply tell people not to eat. As Florida, California, and other states have shown, many smokers are responsive to sustained public education campaigns that urge them to quit. "Don't smoke" is a relatively simple message to convey. Educational campaigns, in the case of obesity, have to encourage healthy eating. Everyone has to eat and, further, nutritional needs vary from person to person depending on a host of factors. This highlights the need to consider action options that will improve our understanding of the impact of law-based interventions and of their synergy with educational and other strategies.

These three principles — the primacy of personal choice, competitive markets' importance to that personal choice and private-sector innovation, as well as the challenges in formulating effective, science-based interventions — point policymakers toward the use of subtle and graduated legal tools rather than rely on legal fiat or court orders. They point in the direction of shaping persuasive, nuanced educational campaigns together with legal approaches that build on initiatives proven in the laboratory of states.

An example to look at is the success Arkansas has had with the legislation it adopted in 2003 that required body mass index (BMI) testing in schools.⁹ Arkansas has monitored implementation of the legislation since enactment and has acted quickly to adjust its approach through education programs and through subsequent legislation; the state was able to

do this by fine-tuning the original approach based on feedback from parents, educators, and public health professionals.

This approach is more complex, and demands more patience and flexibility than one that relies simplistically on the imposition of essentially coercive laws, which simply demand change in personal behavior. Such change may not be realistic. On the other hand, the history of thought about obesity gives us further reason to take a systematic and science-based approach to obesity prevention. The ancient Greeks were among the first to write about the association between obesity and well-being. In De Priscina Medicina, circa 400 B.C., Hippocrates wrote, "It is very injurious to health to take in more food than the constitution will bear, when, at the same time one uses no exercise to carry off this excess.... For as ailment [food] fills, and exercise empties the body, the result of an exact equipoise between them must be to leave the body in the same state they found it, that is, in perfect health."10 Selecting the legal, policy, and other tools best suited to attaining this "exact equipoise" for the individual and for society is the practical challenge faced at the Summit.

The trends in obesity are troubling and pose threats to the health and well-being of Americans. Without question, we should explore, identify, and adopt grounded, empirically validated, law-based strategies to address these threats along with complementary, educational approaches.

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Assessing Laws and Legal Authorities for Obesity Prevention and Control

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aw is an essential tool for public health practice, and the use of a systematic legal framework can assist with preventing chronic diseases and addressing the growing epidemic of obesity.1 The action options available to government at the federal, state, local, and tribal levels and its partners can help make the population healthier by preventing obesity and decreasing the growing burden of associated chronic diseases such as cardiovascular disease and Type 2 diabetes. The Centers for Disease Control and Prevention (CDC) uses the four-part systematic legal framework commonly referred to as "public health legal preparedness" to demonstrate the essential role law can play for any public health issue.² This paper uses the "laws and legal authorities" component of the framework and should be considered in combination with the competencies, coordination, and information-best practices components of the framework.3 Throughout this paper we provide examples of how current laws and legal authorities affect the public

health goal of preventing obesity in both a positive and negative way.

Public health department authority to regulate is a constitutionally established police power.⁴ With the legal power and ethical duty to regulate in order to protect and promote the public's health,⁵ public health law can be effective in creating conditions that allow individuals to lead healthier lives. For example, in 2005, 17 states passed statutes relating to school-based nutrition, and 21 passed statutes related to physical education programs.⁶ Other legislation include restricting access to vending machines,⁷ and introducing fresh, locally grown produce into school nutrition programs.⁸

The concerted use of legal-based strategies as an integral component of obesity prevention and control efforts is nascent. Legal-based efforts to directly impact risk factors for overweight or obesity at the population level are just beginning to complement proven programmatic strategies. Unfortunately, there are existing statutes, regulations, and local ordinances

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that inadvertently contribute to the growing obesity epidemic by creating incentives for individuals to engage in unhealthy behaviors.

Laws and regulations directly and indirectly affect risk factors for overweight and obesity at the population level. While an exhaustive consideration of all the legal authorities that government could use to promote health and reduce obesity is beyond the scope of this paper, we highlight the progressive use of laws at every level of government and the interaction of these laws as they relate to obesity prevention and control. The discussion considers the status of legal interventions in three domains — Healthy Lifestyles, Healthy Places, and Healthy Societies. General gaps in the use of law for obesity prevention and control are identified in this paper and more specifically in Table I. The table serves as the basis for our companion action paper, which delineates options for consideration by policymakers, practitioners, and other key stakeholders (see action paper). The three domains around which this paper is organized are meant to complement the CDC setting-specific framework that includes workplaces, schools, communities, and medical care. The CDC framework offers a programmatic approach to addressing overweight and obesity among Americans, even though the legal issues frequently repeat in multiple settings. Before turning to the legal framework, it will be helpful to describe the constitutional system of federalism, which influences which level of government has the power to act.

Federalism: The Role of National, State, Tribal, and Local Governments

In the United States, federalism is the system in which the power to govern is shared between the national, state, and tribal governments. Federalism is a system of power distribution between the federal government and the states as set forth in the Constitution. The Constitution enumerates a number of powers that may be exercised by the federal government, which the Supreme Court has interpreted expansively. The most important of these enumerated powers is the power to regulate commerce among the states (the Commerce Clause), the power to tax and spend, and the power to implement and enforce the Civil Rights Amendments. Powers that are not enumerated are thereby reserved to the states under the Tenth Amendment. Congress has used its authority under the commerce clause to enact several statutes that regulate farming, food importation, and labeling. It has used its spending and taxation powers to create subsidies for certain foods and tax on others, which create significant incentives or disincentives to businesses and consumers.

When the federal government has the constitutional authority to act, its valid legislation supersedes conflicting state regulation under the Supremacy Clause of the Constitution. Thus, the federal government can explicitly or impliedly preempt state law. Thus, when state legislatures and public health departments consider using regulatory strategies to address the obesity epidemic, they must consider whether Congress has already preempted state or local law.

In deciding legal challenges to state or local law using a preemption argument, the federal courts consider the question and determine whether state law conflicts with federal law and whether Congress intended to preempt the state law in question. If preemption is explicitly or implicitly determined, the court will not allow a state or local regulation that is inconsistent with a federal statute. For example, the New York City Board of Health's first attempt to require menu labeling was contested by the New York State Restaurant Association using a preemption argument. The United States District Court for the Southern District of New York struck down the Board of Health regulation, concluding the regulation was inconsistent with federal food labeling statutes. However, using guidance from the court opinion, the Board of Health adopted a new regulation that applies to restaurants in New York City that are part of restaurant chains with a threshold number of restaurants nationally.9

Assessment of Laws and Legal Authorities within the Three Domains

Healthy Lifestyles

To maintain a healthy weight, individuals need to engage in recommended levels of physical activity and follow a healthful, balanced diet. 10 Governments' use of law can substantially influence whether the population can succeed in maintaining a healthful diet. State and local governments can encourage healthy diets by implementing policies that reduce the availability of unhealthy foods containing excess calories, sodium, and harmful fats such as trans fat and highly saturated fat; and improve easy access to ample amounts of fresh fruits and vegetables. The primary authorities governments use to impact nutrition at the population level, aside from those pertaining to micronutrient fortification of foods, include the following: (1) programs that subsidize, tax, and ban unhealthy foods that are grown and purchased; (2) strategies governments use to allow food marketing; and (3) requirements placed on food labeling.

1. Food Subsidies/Taxation/Bans. Federal subsidies authorized in the Farm Bill¹¹ are not based solely on the principle of encouraging the cultivation of healthy crops. Farm subsidies cover a broad spectrum of foods

Laws/Regulations/ Policies	Public Health Issue	Setting	Behavior Area	Gap/Challenges
Americans with Disabilities Act (ADA)	Civil rights protections to individuals with disabilities in the areas of public accomodation, public services, transportation, education, employment, and telecommunication	Community, Healthcare, Schools, Worksites	Social justice: health access, health disparities, disability	Morbid obesity not recognized as disabling even when it is;ADA definitions require physiological cause
Breastfeeding Promotion Program	Encourages breastfeeding under the child nutrition program	Worksites, Hospitals	Nutrition	Does not make any specific recommendations or requirements to develop environments in which women can safely and privately BF; Formula distributed to mothers in hospitals after childbirth
Child Nutrition and WIC Reauthorization	Encompasses several food programs relating to food insecurity, child and maternal health, and access to healthy food. School wellness policies also developed under Act.	Community; School	Nutrition	Coordination with healthcare sectors, diverging demographics and needs of participants, and access to healthful food choices. Unhealthy foods allowed under EBT program.
Deficit Reduction Act (DRA)	Provides states with flexibility to reform their Medicaid programs	Healthcare	Healthcare	Providers not adequately reimbursed under Medicaid for obesity-related visits so disease goes untreated and preventative measures not explored
Employment Retirement Income Security Act (ERISA)	Ensures health plan coverage for retirees and qualified beneficiaries	Worksites	Social justice: health access, health disparities, disability	Costly COBRA benefits mean many are without healthcare coverage if laid off or upon retirement
Federal Trade Commission Act (FTC Act)	Regulates food advertising	Community	Nutrition, Child protection	Congress withdrew the FTC's ability to regulate "unfair" marketing/advertising to children so children inundated with ads for nutritionally poor foods and fast food establishments
Food Conservation, and Energy Act (Farm Bill)	Access to and supply of healthful foods	Community	Nutrition	Subsidizes foods of poor or minimal nutritional quality
National School Breakfast Program (SBP)	Cash assistance to states to operate nonprofit breakfast program to schools and residential childcare facilitites	Schools	Nutrition	Heavily favors packaged foods which are normally produced with excessive amounts of sugar, high fructose corn syrup, and/or salt
National School Lunch Program (NSLP)	Nutritionally balanced meals at schools and residential childcare facilitites	Schools	Nutrition	Heavily favors packaged foods which are normally produced with excessive amounts of sugar, high fructose corn syrup, and/or salt; Minimal restrictions on sales of competitive foods
No Child Left Behind (NCLB)	Addresses risk factor for disease: low educational attainment and thus, higher likelihood of low SES in adulthood	Schools	Physical Activity, Education	Does not require PA, PE or health education as part of the curricula requirements
Nutrition Labeling Education Act (NLEA)	Labeling of content, nutritional value and place of manufacture for food items regulated by the FDA	Community	Nutrition	Nutrition Facts Panel requirements do not apply to food service establishments. Food companies place diverse and uninformative symbols on the front of packaging, some touting low nutritional standards. No daily recommended value for sugar established.
Pregnancy Discrimination Act	Modifies the Civil Rights Act to protect breastfeeding by new mothers; provide tax incentives to employers to encourage breastfeeding by employees; and provide a performance standard for breastpumps	Community; Healthcare; Worksites	Nutrition	Does not require the provision of lactation rooms for breastfeeding mothers
Safe Accountable Flexible Efficient Transportation Equity Act (SAFETEA or Transportation Bill)	Safe and accessible opportunities to commute, travel and engage in PA	Community	Physical Activity	Focus on vehicular modes of transportation and limited if any consideration to safe routes, sidewalks, pedestrian and bicycle ways
School Bullying Policies	Discrimination against overweight children	Schools	Child protection	Schools lack anti-bullying policies or enforcement mechanisms for existing policies
Social Security Act	Provides disability insurance	Healthcare	Healthcare	In October of 1999 deleted obesity from the recognized list of disabling conditions
Zoning	Determines whether land use favors physical activity and access to healthy foods	Community	Nutrition, Physical Activity	Most often created without public health considerations.

with varying nutritional quality, such as dairy (milk as well as butter), sugar beets, grains (manufactured into whole meal or sweetened white bread), and feed grains for beef (lean as well as fatty). Until recently, government programs have not encouraged consumers to buy healthy foods by subsidizing fresh fruits and vegetables at the level of the farm or retailer.

A few states provide incentives for recipients of food benefits (e.g., food stamps and WIC) to purchase healthy foods by increasing the value of the benefits when used to buy, for example, lean dairy or produce. The United States Department of Agriculture (USDA) has also taken initiative in this area, offering participating women and infants WIC vouchers for fruits and vegetables, and establishing a Farmers' Market program to address the nutritional needs of beneficiaries. 44

Governments can create powerful incentives for healthy eating and exercise. The World Health Organization identifies taxation as an evidence-based policy option to reduce the intake of foods high in fat, sugar, and/or salt¹⁵ that can be considered by governments as effective tools to influence consumer choices. In the U.S., 40 states impose a sales tax on soft drinks and/or snack products. Colloquially known as a "fat tax," the intention is to discourage purchasing calorie-dense, nutrient-poor foods and provide revenues for nutrition education.

Beyond incentives and disincentives, governments can influence healthy eating through its power to prohibit particularly unhealthy ingredients. New York City led the country in banning trans fat in restaurant foods, 19 and other states, cities, and counties have introduced or enacted similar measures. 20 The American Medical Association has asked the FDA to regulate salt as a food additive, imposing limits for added sodium in processed and fast foods. 21

2. Food Marketing Strategies. In a recent study of the marketing practices of 44 food and beverage companies,²² the Federal Trade Commission (FTC) found that in 2006, approximately \$870 million was spent on child-directed marketing, and a little more than \$1 billion on marketing to adolescents, with about \$300 million overlapping between the two age groups.²³ The food industry spends more than \$11 billion to market its products annually, the vast majority of which is spent on promoting unhealthy foods, such as sweetened beverages, sugary cereals, candy, and highly processed foods with added sugar, fats, and sodium to children.24 Advertising is ubiquitous spanning television, radio, and the print media to the Internet and "advergames," where food is used as a lure in fun video games.25

Much of this marketing is targeted toward children and adolescents encouraging them to buy less healthy food options. America's youth is exposed to some 40,000 advertisements annually.²⁶ Young children, aged 2 to 11, are estimated to view 5,538 food advertisements annually; these advertisements mostly promote highly sugared cereals (15 percent), desserts and sweets (16 percent), and restaurants and fast food establishments (25 percent).²⁷ The Institute of Medicine has concluded that marketing influences the "preferences and purchase requests of children (aged 2 to 11) and consumption at least in the short term."²⁸

Currently, the federal government does not systematically regulate or oversee marketing to children, although it does monitor misleading advertisements through the Federal Trade Commission.²⁹ Similarly, neither the FTC nor any other government agency promotes counter advertising focusing on healthy eating.

3. Nutritional Labeling and Education. The USDA publishes a food pyramid and, along with other agencies (e.g., Department of Health and Human Services), offers food advice.³⁰ The FDA requires labeling of packaged foods with ingredients and nutritional values such as calories, fats (saturated, unsaturated, and trans fat), sugar, and sodium.³¹

Unlike for sodium and fat, the FDA does not require that a maximum daily value of added sugars be included on the Nutrition Facts Panel. This leads to inadequate attention paid to the adverse health effects of highly sugared processed food products. The FDA labeling system also does not extend to restaurants, including fast food restaurants where a single "supersized" meal can contain more than half the daily recommended intake for calories, fat, and salt. Some cities and states require or are considering requiring fast food companies to prominently display the nutritional value of their foods.³² New York City has led the way in this area, requiring restaurants to include calorie information on their menus. Once the regulation survived an initial legal challenge,33 city health inspectors began enforcement efforts, issuing violation notices to area restaurants.34

Healthy Places

Access to an environment that promotes physical activity and healthy foods is an important component of public health programs designed to reduce overweight and obesity. Governments at the state and local level can use zoning laws and policy decisions to change the environment in which we live in order to promote healthy eating and encourage individuals to increase their physical activity (e.g., active modes of transportation, recreational activity, and exercise). In

this section, we consider the laws and legal authorities related to the environment that governments use, directly and indirectly, to promote healthier eating and increase activity including zoning and land use planning, and public transportation funding.

1. Zoning Related to Access to Affordable, Healthy Foods. Many places where people live, especially in urban and rural areas of low socioeconomic status, are devoid of grocery stores and markets that provide opportunities for healthy eating. These settings often lack supermarkets, farmers' markets, and places to cultivate fruits and vegetables because local zoning ordinances prevent the use of land for these purposes. For example, larger supermarkets may be "zoned out" of urban settings because zoning requires larger parking areas than possible in the space available. As a result, people in these communities have to travel longer distances for healthier foods and may find themselves surrounded by corner stores and aggressively marketed fast-food restaurants that offer calorie-dense foods as an inexpensive and convenient choice.

Zoning laws also influence where farmers may grow food and where it may be sold. Zoning ordinances can prohibit a "farmers' market" in an urban area because land used for this purpose does not generate the tax base desired by local planners. Similarly, zoning can prohibit farmers' markets in rural or suburban areas because they are considered a commercial business.

Few local and state governments augment the nutritional environment by subsidizing local farms, farmers' markets, and school or community gardens.³⁵ Similarly, only a few local governments are using zoning ordinances to limit the number of fast food and formula restaurants or to ban drive-through restaurants.³⁶

2. Zoning Related to Physical Activity Promotion. In many municipalities and counties, green spaces, playgrounds, sidewalks, and paths are considered secondary to road development, traffic flow, and business access. As a result, even the simplest activities, such as walking, can be difficult due to traffic congestion, lack of sidewalks, and places to go such as shops, museums, banks, and cafes.

While it is becoming increasingly common for government to require developers and industry to perform an environmental impact assessment prior to erecting new, or changing existing, structures, few developers are required to conduct health impact assessments.³⁷ Prudent planning among local and county governments can include a health impact assessment as a necessary precondition of initiating significant building projects.³⁸

3. Public Transportation. Research shows that people who use mass transit on a regular basis are more

physically active than people who commute using a personal car.³⁹ However, federal, state, and local governments provide far greater subsidies for roads than for public transportation. For example, in one year, the Department of Transportation spends over \$30 billion on the nation's highways and roads, compared with the \$24 billion Amtrak received over a time span more than three decades long.⁴⁰

Physical activity is more likely to increase in a population where public transportation is available, safe, and convenient to use, and goes to places where large percentages of the population work, shop, and go to school. Supporting mass transit systems and ensuring safe routes for people to walk to school, work, and recreational venues are an essential part of a community design committed to increasing levels of physical activity.

Healthy Societies

The complex array of causal factors impacting an individual's eating and physical activity patterns includes important sociocultural factors operating at a macroenvironment level, such as poverty, racism, and crime. Policymakers who seek tangible change related to population-level obesity will need to consider legal strategies that confront and rectify these structural and sociocultural issues. Consider, for example, the owner of a supermarket closing the business because crime has significantly increased in the community or children riding the bus to school because the walking path to the school is not safe. This section considers the laws and legal authorities that affect our ability to address obesity from a social perspective (e.g., antidiscrimination laws; health care insurance and benefit design; school and day care for children; and surveillance.)

1. Antidiscrimination Laws. Discrimination against obese persons in education, employment, housing, public services, and public accommodations is ethically unacceptable. However, most local, state, and federal antidiscrimination laws fail to mention obesity. Michigan is currently the only state that extends civil rights protections to weight-based discrimination based on weight.⁴¹ San Francisco⁴² and Santa Cruz⁴³ have city ordinances that have been used to improve accommodations for obese persons.44 Most courts have interpreted the Americans with Disabilities Act⁴⁵ to exclude obesity as a disability within the meaning of the Act, but some have come to the opposite conclusion.46 Scientists meanwhile have little doubt that morbid obesity can be highly disabling.⁴⁷ It can also have the effect of discouraging overweight and obese people from seeking the services they need for fear of discrimination.

Government can use its police powers to improve societal responses to the causes and conditions of obesity, including reducing stigma and discrimination. Using regulatory power, government officials can increase access to health care and other services for overweight and obese persons, including counseling, screening, medical examination, and treatment. Government policy may benefit the overweight and obese persons for by overcoming discrimination as a barrier to using health care and public health systems.

2. Health Care Service or Benefit Design. In reporting its most recent survey, CDC estimated that 34% of U.S. adults aged 20 and older are obese,48 and medical expenses attributed to both overweight and obesity may have been as high as \$78.5 billion in 1998.49 Approximately half of these costs were paid through Medicare or Medicaid. As these numbers (both percentages and costs) continue to grow, the prevention and treatment of obesity has become a major public health goal. As of July 2004, the Centers for Medicare and Medicaid (CMS) officially recognized obesity as a legitimate medical condition, which led to the consideration of increased coverage for scientifically effective obesity treatments.⁵⁰ This has resulted in several states implementing treatment programs through their Medicaid programs. For example, West Virginia and Tennessee offer full and partial reimbursement for Weight Watchers programs,⁵¹ and 42 states offer gastric bypass surgery for the morbidly obese (i.e., body mass index [BMI] of greater than 40).52

3. School, Day Care, and Child Care. Facilities where children learn and are cared for have a special responsibility to ensure that young minds and bodies are active and healthy.53 However, schools have been highly criticized as contributing to the "toxic environment" associated with obesity.54 For many years, schools have offered foods of minimal nutritional value. The two current federal programs that directly address the nutritional needs of school-aged children are the National School Lunch Program (NSLP) and the School Breakfast Program (SBP).55 These programs rely on inexpensive commodity foods, which are high in salt, fats, sugars, and calories.⁵⁶ Financially strapped school districts have also become heavily dependent on revenue from on-site vending machines that primarily dispense sugar-laden sodas and processed snack foods (i.e., "junk food").57

Also of concern, schools no longer provide regular and routine physical education programs for their students. Surveys suggest that only 28% of high school students participate in daily physical education programs, and some schools have foregone physical education requirements altogether.⁵⁸ In response to these criticisms, the federal government, in 2004, man-

dated that every local educational agency participating in NSLP and SBP "shall establish a local school wellness policy by School Year 2006." Local wellness policies must establish goals for nutrition education, physical activity, campus food provision, and other school-based activities designed to promote student wellness. 60 Schools are demonstrating improvement, including Arizona which appropriated funds for school-based programs for children's physical fitness activities. Kentucky instituted minimum nutrition standards for beverages sold throughout the school day: only water, 100% juice, low-fat milk, and beverages with 10 grams or fewer of sugar per serving. 62

4. Surveillance in the Community. Surveillance systems for adult and childhood obesity exist, but improvements are necessary. In addition, although surveillance for overweight and obesity, such as the Behavioral Risk Factor Surveillance System, provides researchers and practitioners with data, it does not lead to treatment for those surveyed.

Currently, no systematic, community-level surveillance programs monitor the root causes of obesity or the impact of intervention strategies targeting these causes. Surveillance of key indicators such as the BMI of children is gaining acceptance. As of June 2008, 17 state governments had passed legislation requiring BMI screening in schools or requiring weight-related assessments other than BMI.⁶³

Gaps in the Use of Laws and Legal Authorities for Legal Preparedness for Obesity Prevention and Control

Laws and legal authorities that impact obesity prevention and control do so both directly and indirectly. Table I considers some of the existing laws that impact obesity more specifically and attempts to identify gaps in legal authority.

The Healthy Lifestyle domain highlights how subsidies, taxation, marketing, and labeling impact our access to and consumption of specific foods. Current law mandates labels on most foods we purchase, but it stops short of requiring prominently displayed calorie information on fast-food restaurant menu boards and sit-down restaurant menus. Such disclosures are needed to assist consumers when they purchase prepared and "fast foods" which make up the majority of the foods we eat. Similarly, current legislation allows marketing to children that appears unfettered and promotes unhealthy foods that are significantly contributing to our childhood obesity epidemic. Some states and local jurisdictions have begun requiring menus to include calorie information; tax high-fat or high-sugar foods; and encourage subsidizing nutrition programs to purchase more fruits and vegetables. These programs are demonstrating promise, but widespread adoption is needed to see an impact over time.

The Healthy Places domain focuses on the impact of zoning and land use regulations on healthy eating and physical activity. Government law and policy controls where we can grow food, sell food, and the types of food that can be sold in a particular place. Currently, few communities consider long-range planning and impact studies for land use that include public health issues. Additionally, local governments do not appear to be taking advantage of the assets of existing communities to promote exercise and physical activity — whether by enforcing current laws or creating new laws to encourage the use of schools, parks, walking trails, sidewalks, etc., to promote more physical activity. Landmark studies are beginning to show that added reliance on public transportation can impact our physical activity levels and thus, obesity rates. Current policy, however, emphasizes personal car use that contributes to less activity.

The Healthy Societies domain considers the complex sociocultural factors that also influence childhood overweight and adult obesity rates. Laws prohibiting discrimination based on weight yet mandating health care benefit design to promote healthy nutrition and physical activity among children appear to be significant areas of opportunity. Currently, a few states include benefit-design reimbursable health care that addresses the early stages of overweight. However, most jurisdictions do not provide for care until an individual reaches morbid obesity — a condition that significantly increases our overall cost of health care. Therefore, the absence of prevention services within current benefit design contributes to the growing problem of obesity. The failure to include obesity in current local, state, and federal antidiscrimination laws represents a gap we can address. Finally, there are additional opportunities to improve the diets of children in schools, day care, and after-school programs through food procurement guidelines that dissuade the purchase and availability of high calorie, low nutritional value foods and instead encourage the consumption of fruits and vegetables and other foods of high nutritional value.

Conclusion

The three domains of Healthy Lifestyles, Places, and Societies, and the scope of legal-based alternatives available to governments for combating the obesity epidemic are quite broad. The federal, state, and local levels of government can use their authority, both directly and indirectly, to prevent and control obesity. Examination of the laws and programmatic strategies as effective strategies for reducing obesity from a public health, population perspective is relatively early in the process. It is important to evaluate and build upon the few direct legal strategies that exist and develop methods to measure the indirect legal strategies that may have an impact. Governments at all levels can assess the magnitude of the epidemic, monitor progress in control, and link people to obesity-related treatment and related conditions by conducting public health surveillance. It can also compel disclosure of consumer information, regulate marketing, create incentives or disincentives for individuals or businesses, and *prohibit* unhealthy ingredients, all of which will *create* healthier places to live.

Government action is far more effective when the state acts in concert with others. Thus, all relevant departments of government have a role to play in a coordinated response, including public health, social services, agriculture, city planning, parks and recreation, transportation, environment, education, energy, and commerce. To optimize impact, government must act in concert with partners in the private sector and civil society, including businesses, the media, academia, foundations, health systems, and the community.64

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Assessing Competencies for Obesity Prevention and Control

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besity is the result of people consistently consuming more calories than they expend.1 A complex interaction of social and environmental conditions affects both energy consumption and physical activity levels.2 These conditions include, but are not limited to the following factors: the availability of affordable and healthy food;3 price disparities between healthy and less healthy foods;4 access to or perceived safety of recreation facilities;⁵ and the conduciveness of the physical environment to active modes of transportation, such as walking and biking.6 As outlined in the "Assessing Laws and Legal Authorities for Obesity Prevention and Control" paper in this supplement issue, laws and government policies in the United States influence nearly all of these social and environmental factors.

Some, but by no means all, of the social and environmental factors related to obesity are presented in Table 1 along with examples of corresponding laws impacting each factor. Even in this incomplete list, it is evident that the range of laws with potential impact on factors related to obesity is very broad. Moreover, many of the relevant laws are not primarily "public health" laws or even laws that are immediately identifiable as having public health effects. In fact, a number

of these laws may be virtually "invisible" to and beyond the control of the average public health official. As a result, health professionals who understand the social and environmental factors related to obesity risk may find it challenging to identify, understand, or develop a strategy to improve the vast array of laws that play a role in shaping our environment and behaviors.

The flip side of this problem is that those who are intimately familiar with the types of laws listed in Table 1 may have little understanding of the extent to which these laws impact public health in general or obesity in particular. Planners, school superintendents, and transportation officials without expertise in public health will find it challenging to see the connection between their decisions and health.7 Agricultural policy experts may focus on encouraging production and lower prices of a few bulk commodities rather than on nutrition.8 Even officials — whose roles cause them to consider some aspects of health, such as traffic engineers focused on reducing motor vehicle crashes and other traffic incidents — may not have occasion to consider broader impacts on public health or obesity. Designing streets with the lowest possible risk of traffic accidents is an important aspect of public health, but equally important is the broader recogni-

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Table

Examples of Conditions That Affect Obesity and Corresponding Laws

Selected factors that may impact obesity → Possible corresponding laws

Health Lifestyle		
Relative costs of high nutrition versus high calorie foods	Agriculture support laws; food stamp Program; "snack taxes"	
Portion size	Nutrition labeling or direct regulation	
Food and beverage selection	Laws regarding food and beverage advertising	
Nutrition information	Menu labeling requirements	
Perceptions of safety in public parks	Design standards; policing policies	
Healthy Places		
Ease or difficulty of access to healthy food versus less healthy food	Zoning and land use policies that affect location of full service grocery stores, farmers' markets, fast-food restaurants, and stores offering a prevalence of energy dense foods	
School meal nutrition	Laws and regulations regarding school meal and competitive foods	
Pedestrian and bike facilities	Government funding priorities; state and local "road codes"	
Neighborhood compactness and "walkability"	Zoning and land use requirements	
Suburban "sprawl" development patterns	Building codes that discourage reuse of old buildings; large minimum lot sizes	
Schools and libraries easily accessible to pedestrians	Policies concerning location and size of public facilities	
Location and accessibility of public parks and recreation facilities	Funding policies and priorities	
Facilities for active recreation	Risk management and tort liability laws	
Availability of gyms or private recreation facilities	n facilities Zoning laws that require recreation facilities	
Healthy Societies		
Access to services for overweight and obese people	Antidiscrimination laws	

tion of how street design impacts the "walkability" of a community and thereby promotes or inhibits physical activity. Similarly, recreation officials may not consider the need for activities likely to appeal to populations at high risk for obesity.⁹

Competency in the use of laws and legal authorities is one of the four core elements of public health legal preparedness. Legal competency is a particularly important component of a comprehensive strategy to prevent and control obesity because law is so pervaise in affecting the social and physical conditions that impact obesity. Public health practitioners, legal counsel, health care providers, and others need to be able to assess current and proposed laws on obesity risk factors and make effective use of laws as specific obe-

sity prevention and control tools. This paper assesses public health legal competency from two sides: (1) the ability of public health and setting-specific actors to understand and apply relevant laws including knowledge of the consequences of action and inaction; and (2) the ability of policymakers and legal counsel to understand and take into account the potential obesogenic effects of their decisions. The assessment includes the identification of critical gaps in those competencies, which are addressed in the companion action paper. Our assessment starts by identifying the main setting-specific actors who should master public health legal competencies and then describes the five basic types of relevant competencies.

Setting-Specific Actors Requiring Legal Competencies The Centers for Disease Control and Prevention (CDC) uses a setting-specific framework to address the programmatic issues associated with obesity prevention and control. The settings communities, medical care, schools including daycare, and workplaces. In the discussion set forth in this paper, the competencies we consider relate to the professionals who are found in each of these settings. However, we will base our discussions on staff competencies in the public health and medical care settings compared to those professionals who are not in the traditional public health occupation, but have the capacity to play a supporting role.

Setting-specific actors within the public health and medical care communities, include, but are not limited to, those working within:

- federal, state, local, and tribal public health agencies;
- hospitals;
- · academic and research centers; and
- public health advocacy groups.

Because the range of laws that impact social and environmental factors related to obesity risk factors is so large, the number of settings outside the traditional public health community that need to be targeted is also large and includes public officials and administrators operating within:

- schools;
- land use planning;
- road and highway departments;
- public transportation;
- parks and recreation;
- agriculture;
- public facilities planning;
- economic development;
- consumer protection;
- · food and beverage industry; and
- health insurance.

With respect to competencies among policymakers and legal counsel, the focus must extend beyond the lawyers and general counsel who work within the relevant agencies. While some of the legal issues and decisions relevant to obesity, such as regulating advertising or banning certain foods, will be high-visibility policy decisions with extensive engagement of lawyers and high-level policymakers, many other day-to-day decisions concerning public facilities, recreation, transportation, and locations of grocery stores will be made by those working at the staff level. For these day-to-day matters, general counsel and managerial-level

personnel need sufficient competency to authorize and empower appropriate staff engagement. Staff will also need the skills to understand the public health obesity issues and to implement strategies to use laws as a relevant tool within their authority.

Five Categories of Legal Competency for Obesity Prevention and Control

The framework for enhancing legal competencies which we develop in this article has five basic parts: (1) understanding and explaining obesity's connection to physical, environmental, and social conditions; (2) identifying laws and policies that affect relevant conditions; (3) identifying and engaging all relevant stakeholders; (4) understanding the process by which laws are developed; and (5) identifying and addressing gaps in the current legal framework. The five categories of legal competencies can be further refined into frameworks of basic knowledge and skills. Tables 2 and 3 set forth two such frameworks — one focused on the health professional, the other on legal and policy decision makers and program administrators whose decisions may impact health and obesity.

(1) Understanding and Explaining Obesity's Connection to Physical and Social, Environmental Conditions

The critical first step in developing competency in public health legal preparedness for obesity prevention and control is to be capable of articulating the connection between obesity and particular physical and social aspects of our environment that play a role. Important research relating to the effects of the physical and social environments on obesity is under way, though clearly more work needs to be done. The work conducted thus far, however, falls outside the usual expertise and focus of government health officials, lawyers, and policymakers because it extends from land use to school construction to economic development. As a result, an essential element of increasing legal competency will be the process of educating nonhealth professionals about the health consequences of their decisions. Therefore, competencies for health care and public health professionals include the ability to present legally relevant information to the appropriate decision makers in a form that is likely to be understood by a non-health professional.

(2) Identifying Laws and Policies That Affect Relevant Conditions

The next step in assessing and enhancing legal competency is to identify laws that influence conditions and factors associated with obesity. Creating such an inventory is challenging because the range

Table 2

Legal Competencies for Obesity and Public Health Professionals

A. IDENTIFIES AND UNDERSTANDS RELEVANT LAWS, POLICIES, AND GOVERNMENT PRACTICES

- I. Appreciates the role of law, policies, and government practices in promoting obesogenic or health promoting conditions
- 2. Identifies laws and policies that promote obesogenic or health-promoting conditions this process entails a process of moving from broad categories of laws to the specific provisions that are implicated
 - i. Recognizes the broad area of law that may be implicated, e.g., land use and zoning, agriculture support policy, school meal program, labeling requirements
 - ii. Identifies the most salient rules and policies within the broad area, e.g., parking and set back requirements, rules on competitive foods in schools, liability and immunity standards relevant to community use of school facilities, road code
 - iii. Understands the interactions among laws from different areas, e.g., community use of schools and potential tort law liability
- 3. Identifies laws and policies that may disproportionately impact or discriminate against those who are overweight or obese and against minorities or those with low socio-economic indicators
- 4. Identifies the appropriate level of government (federal, state, local) whose rules or policies are most salient to the situation, and has authority ("pre-emption")
- 5. Understands the basic function of the relevant laws and how they are made, implemented and enforced

B. EXPLAINS HEALTH AND RELATED NON-HEALTH CONSEQUENCES TO DECISION MAKERS AND STAKEHOLDERS

- I. Understands what information is considered legally relevant, for example, under local law, does construction of a fast food restaurant require a finding that it is "in the public interest," and if so, has this standard been interpreted to allow consideration of public health concerns?
- 2. Understands and considers non-legal factors that may be of concern to decision makers and stakeholders, e.g., economic concerns, educational quality, energy usage, crime control
- 3. Collects relevant data, including data on effectiveness of different programs or strategies
- 4. Compiles and presents research and information in a form that is likely to be understood and appreciated by the particular audience
- 5. Identifies opportunities systematically to incorporate public health considerations into decision process, e.g., creating an on-going institutional public health presence in processes such as asking health officials to comment on master plans or projects, or incorporating health data into planning processes

C. IDENTIFIES AND ENGAGES ALL RELEVANT STAKEHOLDERS

- 1. Identifies relevant stakeholders both inside and outside of government, e.g., medical providers, school-focused groups, environmental
- 2. Identifies and highlights non-health benefits of interest to particular stakeholders that may flow from health promoting practices, e.g., more walking may reduce fuel consumption, and encourage collaboration among stakeholders on promoting these practices
- 3. Identifies and understands the full range of concerns, including political, economic and social concerns that may be important to stake-holders or decision makers

D. ENGAGES LEGAL OR POLICY DECISION MAKERS WHERE APPROPRIATE — ENGAGEMENT INCLUDES EVERYTHING FROM REPORTING A VIOLATION OF LAW TO THE ENFORCING AGENCY TO GETTING INVOLVED IN AN ON-GOING DECISION PROCESS

- 1. Determines whether any intervention is appropriate
 - i. Determines whether there are limits on agency authority which would restrict intervention
 - ii. Determines whether legal advice is necessary in order to make a decision about intervention
- 2. Determines the appropriate agency or decision maker with whom to intervene
- 3. Determines what intervention is appropriate, e.g., report a violation, testify at a hearing, participate through more informal mechanisms
- 4. Determines the most appropriate time to intervene, e.g., wait for formal process such as public hearing or act immediately

E. IDENTIFIES AND ADDRESSES GAPS IN CURRENT LAWS OR LEGAL PROCESSES

- 1. Monitors areas of particular concern to see how laws are being applied and what results are occurring
- 2. Identifies conditions or situations that have sufficient health relevance to warrant legal reform
- 3. Collaborates with lawyers and policy makers to craft legal remedies
 - i. Provides relevant data to support legal change
 - ii. Assists in analyzing costs and benefits of alternative legal approaches
- 4. Identifies "targets of opportunity" to improve the legal framework, e.g., reauthorization of an existing program

Legal Competencies for Legal and Policy and Decision Makers

A. RECOGNIZES PHYSICAL/ENVIRONMENTAL/SOCIAL CONDITIONS RELEVANT TO OBESITY

- 1. Recognizes physical/environmental/social conditions that may be either obesegenic or health-promoting
 - i. different categories of conditions, e.g., those affecting access to food, and those affecting physical activity
 - ii. in different settings, e.g., schools, workplace, transportation systems, recreation facilities
- 2. Recognizes situations of potential discrimination against the obese, e.g., access to health care, access to public facilities

B. RECOGNIZES WHEN LAWS, POLICIES AND GOVERNMENT PRACTICES ARE RELEVANT TO OBESITY

- 1. Examines whether its legal or policy decisions may produce obesegenic or health-promoting conditions
 - i. considers the likely intended and unintended effects of decisions in critical areas such as nutrition and physical activity
 - ii. consider how significant those effects are likely to be with respect to obesity or health-promotion
- 2. Examines whether its legal or policy decisions may disproportionately impact obese people

C. CONSIDERS INTERESTS OF AND CONSULTS STAKEHOLDERS

- 1. Identifies stakeholders with relevant interests
- 2. Identifies opportunities that have multiple benefits including non-health benefits, e.g., more walking may reduce fuel consumption, and encourage collaboration among stakeholders on promoting these practices

D. USES EXISTING LEGAL AUTHORITY IN A MANNER THAT IS SENSITIVE TO CONCERNS ABOUT OBESITY

- 1. Understands scope of legal authority and legal responsibility to consider health-promotion
- 2. Integrates heath and obesity data into decision process and consults health professionals
- 3. Evaluates health impact of decisions and considers this in decision making
- 4. Understands legal obligations towards those who are obese
- 5. Identifies opportunities systematically to incorporate public health considerations into decision process, e.g., creating an ongoing institutional public health presence in processes such as asking health officials to comment on master plans or projects, or incorporating health data into planning processes

E. ADDRESSES GAPS IN CURRENT LAWS OR LEGAL PROCESSES

- I. Monitors effects of decisions
- 2. Identifies conditions or situations that have sufficient health relevance to warrant legal reform
- 3. Collaborates with health professionals to craft legal remedies
 - i. Identifies the data that would be useful or necessary to support legal change
 - ii. Assists in analyzing costs and benefits of alternative legal approaches
- 4. Identifies "targets of opportunity" to improve the legal framework, e.g., reauthorization of an existing program

of obesogenic, socioenvironmental factors is very broad. In addition, the web of laws that impact each of these socioenvironmental factors is complex and includes laws and legal authorities at every level of government.

Further complicating matters is the fact that many of the laws that influence the obesogenic nature of the environment may not on their face appear to have anything to do with health. For example, sprawl development patterns that discourage walking may in part be an unintended consequence of such diverse laws as the federal highway building program, the federal income tax home mortgage deduction, local building codes that discourage reuse of buildings in older neighborhoods, and local zoning ordinances.¹²

The process of identifying relevant laws requires collaboration among health care and public health experts, who understand the programmatic issues, and legal experts, who understand the law. Together they must probe to identify laws and legal authorities that may contribute to obesity as a public health problem. For example, in exploring why some communities are underserved by grocery stores, a simplistic answer may be that grocers are reluctant to build in poor communities. Yet this answer is clearly incomplete; poor people need to buy food, so it is not at all obvious why supermarket chains would not want to build stores where there is demand for their product. In the case of urban supermarkets, researchers point to deterrents such as more demanding regulatory framework typical of central cities, environmental cleanup costs, and a lack of urban development financing.¹³ What is important from a public health legal competency standpoint is that health care professionals, public health practitioners, and legal counsel must continue to recognize common ground while addressing the

issue to complete a full analysis that goes below surface explanations.

Health officials need to understand how laws are implemented in their particular locale. In addition, health officials will benefit from methods that help them target where and what the opportunities are in these laws and decision processes to interject health considerations. Legal competency materials for health professionals must be developed which are both reasonably specific and also address local variations. Some of this is underway. The American Planning Association (APA) began collaboration with the National Association of County and City Health Officials (NACCHO) to create a number of useful tools and sponsored numerous programs addressing issues at the intersection of public health and the built environment.¹⁴

(3) Identifying and Engaging All Relevant Stakeholders

The socio-physical conditions that affect obesity implicate many sectors including schools and business, agriculture and food retailing, and transportation systems and urban design. For example, there may be environmental reasons for seeking to reduce automobile dependence, and this goal is complementary to the goal of increasing physical activity through walking and biking. With respect to each of these areas of society and issues, there are groups of stakeholders who should be consulted and engaged on issues surrounding obesity.¹⁵

Such engagement offers the opportunity to both learn and teach. First, there is much that health professionals, public health officials, and lawyers can learn about stakeholder concerns, potential complications, and potential benefits. For example, legal strategies that create safer walking routes throughout the community and implement crime prevention to keep residents safe may result in communities with more walkers, less traffic congestion on the street, and school children getting more physical activity during the day. Win-win solutions will not always be possible but the quality of legal and policy decision making will be enhanced by having a better understanding of the full range of concerns and stakeholder interests. Second, engagement offers the opportunity to "teach," i.e., to broaden the understanding of obesity, its costs, its causes, and ways to combat it. Building this broad understanding about obesity will, over the long run, enhance the quality of legal and policy decision making and build the foundational public consensus for implementing those laws and policies.

(4) Understanding the Law and Legal Authorities Development Process

The next aspect of enhancing competency in legal preparedness is assuring that public health concerns are properly taken into account when legal decisions are made. This requires that those with knowledge of health effects are effectively raising health and obesity issues with legal and policy decision makers and that, where permissible, those decision makers are exercising their authority with sensitivity to the issues. Knowing when, how, and to whom information about health effects should be addressed is a challenge for health practitioners. Sometimes there are formal decision-making processes that include public hearings or formal presentations of information. In other contexts, the decision process may be more informal or less public. For example, some zoning and land use decisions may be made through a public process with relatively formal procedures. On the other hand, decisions by an economic development agency about whether to encourage construction of a much-needed grocery store may be made more informally through an internal deliberative process. A further issue that public health officials must consider is the scope of their own authority to intervene, whether formally or informally, in decision processes. For example, a formal option available to a public health official trying to affect the content of a school wellness policy includes directly addressing the school board by speaking during the public comment period of a board meeting or by being placed on the board's agenda. An informal option includes speaking one-on-one to state school board association policy staff or school employees who write the policy that the board will adopt.

A significant step for legal and policy decision makers is to understand the scope of their legal authority in order to take into account health impacts. Such an understanding may require a shift in focus. For example, planning officials may consider a lack of access to supermarkets as an "economic development issue" rather than a health-related land use issue. 16 Similarly, economic development officials may believe that their primary job is to strengthen the economy and as a result, they may not understand that a decision which encourages the development of a fast-food restaurant rather¹⁷ than a grocery store may have negative health effects.18 While the legal framework may not always allow a decision maker to take health effects into account, sometimes officials may have broader authority than they recognize. In the law and policy development process, it is important to consider integrating health data into the routine decision-making process. For example, San Francisco has developed the Healthy Development Measurement Tool. This tool identifies

a number of health-related data including neighborhood proximity to grocery stores and recreation facilities, along with basic health data such as infant birth weight and causes of death. Data collected from this tool are then mapped and made easily accessible to planners, community leaders, and policymakers.¹⁹

(5) Identifying and Addressing Gaps in the Legal Framework

The final component of legal competency is the ability to identify gaps in the legal framework and approaches to address them. As part of this process, it is necessary to consider whether proposals for change are consistent with existing laws and legal requirements, whether the benefits outweigh the costs, and whether any proposal may have unintended, adverse consequences. Finally, proposals must consider the most effective form of legal intervention — be it direct regulation such as mandates or prohibitions, indirect regulation such as tax incentives, or direct government action such as providing needed facilities or care — and the appropriate level of government to be involved, whether federal, state, local, or tribal.²⁰

As in identifying relevant laws, the process of identifying gaps in the legal structure requires collaboration between health professionals who understand the physical, environmental, and social changes that can make the environment less obesogenic, and policymakers who understand the legal tools and constraints for bringing about these changes.

Gaps in Competency for Legal Preparedness for Obesity Prevention and Control

One of the major challenges in addressing obesity is that health practitioners and researchers, who understand the health consequences of particular physical or environmental conditions, may lack understanding of the relation between relevant laws and these conditions. Conversely, some non-health professionals who understand the laws may not understand the relationship between the laws and their health consequences. A major gap that needs to be filled is the analytic gap between understanding obesogenic conditions on one hand, and the laws or policies that cause or contribute to those conditions on the other. For example, in a 2007 survey, local government officials identified the tools and resources that would be the most helpful in addressing barriers that they faced in efforts to promote physical activity. The top three tools identified were "increased training and education," "sample policies and programs," and "best practices and case studies."21 A seemingly simple question such as, why are there no sidewalks in my neighborhood? can have a surprisingly complex legal answer. The process of filling this analytic gap will be important in setting a research agenda and acting when new findings help us to better understand these relationships.

A second gap is that even with increased understanding of how laws and policies influence obesogenic conditions, there is a need for more particularized analysis that looks at the unique laws and policies of specific jurisdictions. Many of the laws that relate to obesity are state or locals laws that vary throughout the United States. Demographic and environmental differences relevant to obesity prevention and control also influence the nature and effect of local laws and policies. Without an understanding of the particular laws and legal processes that are involved in a given jurisdiction, public health officials may find it difficult to be effective in important decision-making processes. The American Planning Association and the National Association of County and City Health Officials have jointly published a "Fact Sheet" of "Planning Terms for Public Health Professions."22 Likewise, the National Association of Local Boards of Health has issued a monograph entitled "Land Use Planning for Public Health: The Role of Local Boards of Health in Community Design and Development."23 Both publications are informative but quite general in nature. Thus, training materials and guidance for the different targeted sectors that is tailored for particular locations is needed. Britain provides an interesting model. As a result of a project by the Government Office for Science,24 it has issued a 194-page "toolkit for developing local strategies" to address obesity with strategies that are specifically tailored to England.²⁵

A final gap is between the legal competencies outlined in Tables 2 and 3 and the realities on the ground. Although there is no comprehensive survey of each targeted sector, anecdotal evidence suggests that many professionals in several sectors have not fully engaged with the programmatic issues surrounding obesity nor fully understand the relevant legal issues.²⁶ One community development planner whose agency was involved in low-income housing but not grocery stores observed:

We have not done anything in Milwaukee besides responding to operator's proposals for [grocery store] development. It is an issue the community raises from time to time, but it has seen little action from the city. Is it our role? Grocery store development? Shouldn't we let the private sector lead?²⁷

Even communities that have been highly effective in creating obesity-combating public facilities and infrastructure have sometimes done so without any deliberate focus on health and, as a result, may have missed opportunities to be even more effective.²⁸

Conclusion

Obesity's causes and consequences implicate a broad array of laws, regulations, and government policies. While some of these laws were explicitly designed with health effects in mind, many others were designed to address other issues and are administered by people who do not see health in general or obesity in particular as a relevant focus of their work. Thus, legal competencies must be addressed both to health professionals, who with proper training can effectively interject health considerations into decision processes, and to non-health professionals so that they can better understand the health consequences of their legal and other policy choices. Together, they need to bridge the existing gaps in legal competencies to ensure that laws and legal authorities can be effective against obesogenic behaviors.

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Assessing Coordination of Legal-Based Efforts across Jurisdictions and Sectors for Obesity Prevention and Control

Marice Ashe, Gary Bennett, Christina Economos, Elizabeth Goodman, Joe Schilling, Lisa Quintiliani, Sara Rosenbaum, Jeff Vincent, and Aviva Must

merica's increasing obesity problem requires federal, state, and local lawyers, policymakers, and public health practitioners to consider legal strategies to encourage healthy eating and physical activity.1 The complexity of the legal landscape as it affects obesity requires an analysis of coordination across multiple sectors and disciplines. Government jurisdictions can be viewed "vertically," including the local, state, tribal, and federal levels, or "horizontally" as agencies or branches of government at the same vertical level.2 Inspired by the successful tobacco control movement, obesity prevention advocates seek comprehensive strategies to "normalize" healthy behaviors by creating environmental and legal changes that ensure healthy choices are the default or easy choices.3 With many competing demands on diminishing municipal budgets, strategic coordination both vertically and horizontally is essential to foster the environmental and social changes needed to reverse the obesity epidemic. No single agency at any level of government can be solely responsible for ensuring the protection and promotion of the public's

health; multiple agencies that traditionally have little or no historic connection to a state or local health department must be allies in achieving desired results related to obesity.

Complex public health challenges, such as obesity, demand trans-disciplinary and multi-sectoral strategies, resource sharing, and political support. However, coordination between and within government agencies is hindered by several factors. First, statutes and ordinances typically grant agencies narrowly defined powers. Second, given such limited legal authority, government agencies traditionally focus their programs on specific subject areas (e.g., public safety and law enforcement vs. housing vs. transportation, etc.). The agencies' staff become subject matter experts within these programmatic silos with few incentives for agencies to reach out to coordinate vertically or horizontally. One government agency (e.g., a public school) is isolated from the related work of another agency (e.g., a local parks department) that shares a common commitment to the same target audience. Further, neither agency is even aware of the commit-

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ment of a third (e.g., a health department) to increase opportunities for healthy eating and physical activity in a community. As a result, agencies may work in isolation with under-funded mandates, while opportunities to share facilities, fiscal resources, and personnel are lost. Ultimately, efficiency among many agency agendas is hindered.

Inefficiency in obesity prevention and control efforts that stems from a lack of coordination around legalbased efforts can only aggravate the existing health disparities that already contribute to this issue. As it is, the economically and socially disadvantaged in our society, who live in communities with more fast food, fewer supermarkets, the lowest employment and highest crime rates, suffer a disproportionate burden of obesity-related diseases.4 Long and healthy lives are tied to where people live, to income, wealth, education, race/ethnicity, immigration status, and the degree of inequality in society, as well as to other physical and social determinants of health.⁵ If the income and other social disparities between African Americans and whites were eliminated, it is estimated that over 886,000 premature deaths in African American communities over the past decade would have been avoided.6

This paper assesses the current status of both horizontal and vertical coordination for legal-based obesity prevention and control efforts. The discussion predominantly focuses on horizontal coordination via voluntary government approaches and public-private partnerships, yet it should be noted that other means — such as compelled coordination structures, formal rulemaking, and other sorts of regulatory apparatus — are sometimes necessary to affect change. We touch on just a handful of strategic coordination efforts across jurisdictions from the standpoint of key settings: local government, public schools, health care institutions, and workplaces to illustrate this overall theme. We highlight gaps in the coordination of legal-based approaches to obesity, which the companion

paper "Improving Coordination of Legal-Based Efforts across Jurisdictions and Sectors for Obesity Prevention and Control" addresses in detail.

Community Settings: Horizontal Coordination among Government Agencies

Various local government agencies provide excellent examples of horizontal coordination and are emerging as the principle actors for adopting *creative* legal strategies to address the nutritional and physical activity factors associated with obesity. We focus in this section on the regulatory and fiscal powers of primarily local governments that help communities improve access to healthy foods and redesign their built environments to encourage greater levels of physical activity.

Recent regulatory activities led by local health agencies to support healthy eating include menu labeling requirements and trans fat bans. For example, the New York City menu labeling laws were first successfully challenged in court by the state restaurant association as too restrictive. The Federal District Court outlined in their opinion why federal law preempted the local statutes. Cooperating closely, the New York City Law Department and the Department of Health & Mental Hygiene drafted an amendment to the city health code that met the needs of the health department; this amendment implemented menu labeling in a manner that withstands legal challenge.

Another example of horizontal coordination includes the recent trend of health departments embracing Health Impact Assessments (HIA), which provide decision makers with information — arguably the evidence for the record — about how a policy, program, or project may affect the public's health. HIAs are being used to influence access to and distribution of food and recreational opportunities⁷ and to create mitigation measures for projects that are found to be potentially harmful to public health.

When health departments coordinate with other government agencies, their influence can expand well

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Table I

Non-Health Agencies' Contributions to Obesity Prevention

Planning Agency Activities

Enhanced physical activity:

- Create gathering places that promote social and community connection through mixed use developments and mixed housing types
- Encourage transit oriented development to maximize the use of mass transit opportunities
- Adopt form based zoning codes to facilitate more compact, mixed use developments
- Ensure sidewalks and parks are available, repaired, and well lit
- Install protected bike paths along major commute sheds and to/from schools
- Implement traffic calming techniques along pedestrian and bicycle corridors

Increase access to healthy foods:

- Expand farmers' markets in low income areas
- Reform zoning codes to allow for more community gardens
- Allow urban farming and the sale of produce and meat in corner stores,
- Eliminate sidewalk obstruction bans preventing produce sales
- Curtail liberal zoning for fast-food restaurants

Economic Development Agencies

- Issue financial incentives (e.g., bonds, tax increment financing, etc.) to improve blighted neighborhoods
- Establish policy preferences to encourage the development of projects that provide new grocery stores and compact, walkable transit villages to these distressed communities.

Park and Recreation Agencies

- Adopt capital improvement plans for equitable distribution of parks, recreational facilitates, trails, and open spaces for
 physical activity throughout a community
- Ensure foods sold in park areas are healthful and nutritious; prohibit foods of minimal nutritional value
- Work with law enforcement agencies to maintain safety to enhance use of these facilities

Law and Code Enforcement Agencies

- Work with park and recreation agencies to maintain safety in parks and opens spaces, as well as neighborhood streets and businesses
- Work with housing and code enforcement agencies to enforce nuisance abatement powers to remove abandoned buildings and blight that may inhibit neighborhood physical activity
- Include compliance with menu labeling requirements in restaurant inspections

Metropolitan Planning Agencies

- Manage federal and state transportation funding to allocate and prioritize regional transportation projects that encourage walking and cycling as viable modes of transportation
- Facilitate collaboration among local governments to plan for regional transportation needs
- Allocate a greater percentage of funds for projects that promote transit, walking, and cycling
- Ensure transportation routes connect low-income communities with grocery stores and other food venues
- Adopt special standards for street design and width that can favor walking and biking as advocated by the National Complete Streets Coalition.

beyond the traditional public health approaches to address obesity prevention and control. Collaborative relationships between municipal health and urban planning departments have led to limitations on the number, location, and density of fast-food restaurants. Likewise, health department collaboration with taxing agencies has led to the adoption of "junk food" and soda taxes; with recreation departments to the development of parks and bike paths; and with economic development departments with incentives to supermarkets to operate in underserved areas, expansion of mass transportation, and provision of lighting and playgrounds in housing developments.⁸

Such taxing, urban planning and zoning laws, and economic and community development strategies can further public health goals by changing the landscape of our cities and towns. The three land-use planning approaches — comprehensive long-term plans, land development/zoning codes that regulate private activities, and capital improvement plans that dictate public investments — can advance obesity prevention as a priority in planning efforts and infrastructure improvements. Table 1 describes the various ways that

horizontal collaboration between government agencies can further public health agendas and lead to efficient service delivery.

School Settings: Vertical and Horizontal Coordination

Public schools, which offer safe places for physical activity and provide children complete meals through their food programs, are affected by laws and legal authorities at the federal, state, and local levels. In this section we consider how coordination vertically and horizontally affects the ability of schools to provide access to physical activity and healthy foods. While there are excellent examples of coordination, there remains a significant gap in potential service delivery.

(a) Access to Physical Activity

Of the many areas where vertical and horizontal coordination could increase opportunities for physical activity within school settings, two are discussed below: safe routes to school programs and joint use partnerships.

Table 2

Key Elements of Local Safe Routes to School Programs (see reference note 10)

Health benefits of kids walking and bicycling to school	 Two recent studies have found that walking to school is associated with higher overall physical activity throughout the day (see reference note 11). There are many potential benefits of physical activity for youth including (see reference note 12): Weight and blood pressure control Bone, muscle, and joint health and maintenance Reduction in the risk of diabetes Improved psychological welfare Better academic performance (see reference note 13)
Key elements of safe walking and bicycling environments	 Neighborhood schools that are within walking and bicycling distance from homes Sidewalks or bike paths that connect homes with schools Improved opportunities to cross streets (such as the presence of adult crossing guards, raised medians or traffic and pedestrian signals) Slow vehicle speeds accomplished through roadway safety measures (traffic calming) and/or police enforcement where needed
Local collaboration needed for safe routes to schools programs	 Children — to provide them with basic safety education, such as how to cross streets, obey crossing guards and be visible to drivers. Parents — to create awareness of the need for pedestrian and bicyclist safety education and opportunities to walk and bike and by practicing safety skills with their children. Drivers — to alert all drivers to the presence of walkers and bicyclists and the need to slow down. Law enforcement — to enhance pedestrian and bicyclist safety with school zone enforcement. Local officials — to identify changes needed to improve walking and bicycling conditions around schools.

SAFE ROUTES TO SCHOOL (SRTS) PROGRAMS

SRTS programs are a multi-jurisdictional example of collaboration driven by legislation that begins at the federal level with the Department of Transportation, requires coordination at the state level, and results in funding at the local level. Table 2 outlines the key elements of local SRTS programs. The purposes of the programs are to enable and encourage children to walk and bicycle to school by making it a safe and appealing choice. The program requires horizontal coordination among government agencies to implement projects that improve safety, reduce traffic, improve air quality, and promote a healthy and active lifestyle from an early age. The program also goes beyond government agency coordination and embraces community leaders, parents, and schools. Across the nation, SRTS programs encourage and enable more children to walk and bike to school safely.9

As the SRTS programs are in their relative infancy and while local jurisdictions adopt laws and legal authorities to ensure safe walking and bicycling routes, the program can be in jeopardy of extinction before it reaches full potential. *Transportation Tomorrow* is a 2008 federal government report that includes recommendations for the future of federal transportation policy, programs, funding, and revenue generation that ignored Safe Routes to School programs and more generally, walking and bicycling. The report neither recognized nor evaluated the surface transportation system's considerable impact on public health through the built environment's impact on obesity, physical inactivity, and injury.¹¹

JOINT USE PARTNERSHIPS

Joint use partnerships focus on horizontal coordination among agencies within the same or neighboring jurisdictions that reflect the willingness of school districts to open school grounds for after-hours recreational uses. They may involve the sharing of outdoor play areas, sports fields, gymnasiums, swimming pools, classrooms, computer rooms, and libraries. Forming the requisite partnerships between school districts, local government agencies, and communitybased organizations is a complex, but surmountable, task. Despite serving the same or similar constituencies, these entities rarely have a history of working together. More commonly, school districts and other agencies have different funding sources and cycles, different institutional cultures, competing political agendas, and lack of state policy guidance.12

The partnerships, typically formalized through the creation of a joint use agreement, provide an opportunity for school districts and other government agencies (e.g., park and recreation departments) or non-

profit entities (e.g., youth sports programs) to increase a community's access to recreational spaces and programs. The agreements are contracts that articulate the facilities to be shared and the conditions of the shared uses, specifically the financial responsibilities, maintenance and operation responsibilities, and legal obligations, such as liability insurance coverage. The ultimate success and ongoing sustainability of the joint use partnership hinges on the clarity, comprehensiveness, and political support of the formal joint use agreement. Because school districts often worry especially about their potential legal liability arising from opening up their school properties outside of school hours, careful attention to this feature of the agreement is critical.

Codified examples of joint use agreements exist. For example, in DeKalb County, Georgia, the county considers school playgrounds to be community parks allowing for after school use, maintenance to be performed by county park personnel, and liability questions to be shifted away from the school.

(b) Access to Healthy Foods

The recently passed federal Farm Bill legislation¹⁵ expands the federal school lunch program¹⁶ by increasing the number of elementary schools receiving free fresh fruits and vegetables when the majority of children are eligible for free or reduced price snacks and meals. The program, which had operated in only 14 states with \$9 million in funding, will become a national program with \$40 million available in the 2008-09 school year; in 2012, the program would be funded at nearly eight times its current size — \$150 million each year with annual adjustments for inflation.¹⁷

This bill, which is enacted at the federal level and administered by the United States Department of Agriculture (USDA), gives schools new opportunities to effectuate improved school nutrition policies articulated in their school wellness plans and opens new opportunities for horizontal public/private coordination — especially through Farm to School programs that currently operate in almost 2000 schools across the country. In the past, USDA guidance actively discouraged procuring foods from local vendors as a potential violation of the interstate commerce clause. Thankfully, in the recent reauthorization of the Farm Bill, this concern was dropped and now schools can buy and feature locally produced farm fresh foods such as fruits and vegetables, eggs, honey, meat, and beans on their menus; they can also incorporate nutritionbased curriculum and experiential learning opportunities through farm visits, gardening, and recycling programs. Farmers have access to a new market through schools and connect to their community through participation in educational programs designed around local food and sustainable agriculture. As schools work to eliminate foods of minimal nutritional value from their vending machines and other sales venues, the Farm to School programs can introduce healthy products into schools' food culture and practice.

Health Care Settings: Coordination to Affect Regulatory Changes

Access and use of the health care system by both children and adults is significantly associated with health insurance coverage. 19 Over 50% of uninsured adults have no regular source of health care and regularly report delaying or going without care. 20 In 2006, more than 12% of children and over 20% of adults aged 18-64 were uninsured. More than one-fifth (22.6%) of the uninsured that year rated their health as fair to poor. 21

Being uninsured strongly links to low family income and unemployment,²² both of which are risk factors for obesity.²³ Despite improving economic conditions, during 2004-2006 the number of uninsured climbed by 3.4 million, including 1 million additional uninsured children. This rise followed a 6 million-person increase during the first 4 years of the decade.²⁴ During times of economic downturn, the ranks of the uninsured increase rapidly; estimates show that each 1% increase in the unemployed translates into a 1.1 million rise in the uninsured.²⁵

The Medicaid program offers comprehensive coverage for low-income adults and children who are eligible. For children, Medicaid is supplemented by the State Children's Health Insurance Program (SCHIP). Medicaid's pediatric benefit for children, known as early and periodic screening diagnosis and treatment (EPSDT), offers comprehensive, regular health assessments including assessment of nutritional risk and weight.

Although the majority of obesity prevention and control strategies are implemented in non-health settings, the health care setting is important for obesity efforts, particularly those targeting children. Incorporating third-party reimbursement for interventions in the health care setting focused specifically on diet and physical activity can reinforce school and community programs with similar intentions.

Millions of dollars are spent each year on diets, diet plans, and weight loss strategies with no scientific basis, due in part to an uninformed population, a lack of oversight, and in part to insurance regulations that direct care outside of the health care system for lack of reimbursement. Health care providers are respected and listened to by parents and children because they are licensed and rely on scientifically supported treatments. Health providers serving overweight and obese patients can also identify additional and underlying health risks related to obesity, and promote a range of health and lifestyle interventions.²⁶ Because obesity tends to be a "family trait," reimbursing for interventions delivered through the health care system may place providers in the best position to influence entire families about obesity prevention and conrol.²⁷ For example, pediatric health care providers can influence adult health by advocating for family lifestyle changes and regular access to medical care for adults of all ages can be a critical step in prevention of weight gain, identification of risk, and interventions to treat obesity and its sequelae. Currently, the predominant policy for third-party reimbursement focuses much more heavily on treatment of the health consequences of obesity instead of preventing excess weight. In the case of overweight, few interventions allow reimbursement and require the patient to become obese and display related medical conditions to receive care. Despite the lack of adequate reimbursement, many physicians do devote time and effort to provide the nutritional counseling and support, general lifestyle and mental health screening, and counseling necessary to help people effect behavioral change.

An additional coordination challenge surrounds BMI and obesity screening for schoolchildren. At present, the results of screening do not necessarily lead to interventions for overweight or obese children either because the information is not conveyed to the parent in an understandable manner, or the parents do not take action based on the information possibly due to lack of insurance. Some failure to report both inside and outside the school setting may relate to issues of student privacy and patient-provider²⁸ as well as employer-employee²⁹ confidentiality, which hamper development of shared information systems, thus possibly increasing the likelihood of follow-up.

Workplace Settings: Government and Private Sector Coordination

The workplace is a primary channel for reaching working adults with health promotion programming, ³⁰ and employers are increasingly turning to such programming to help contain costs, improve productivity, enhance satisfaction, create healthier workplace cultures, and improve their standing as socially responsible organizations. ³¹ The last decade has seen a rapid expansion in the number of employers offering comprehensive workplace health promotion (WHP) programs that emphasize healthy eating, physical activity, and weight management and include social, environmental, and policy influences beyond individual-level

Table 3
Types of Worksite Health Promotion Programs Offered Employees

WHP Strategies	Examples	Effectiveness	Potential problems
Incentive strategies	Discounts, co-payment supplements, rewards for those meeting lifestyle goals	Clinically significant weight loss could be promoted by providing moderate financial incentives (see reference note 37). Incentive strategies are best if positioned to drive greater participation in WHP programming and expanding the reach beyond only the healthy, motivated employees to those who might benefit more from intervention (see reference note 38).	Incentive programs are coming under increasing scrutiny. And strategies that institute differential premiums based on an employee's weight have come under fire from both the public health and regulatory communities that have criticized both their effectiveness and legality.
Interpersonal support strategies	On-site counseling, telephonic coaching, discounted commercial program access, reimbursement for comprehensive nutritional counseling	These strategies are extremely promising, given that the strongest evidence of weight loss efficacy is found for interpersonal support approaches (see reference note 39).	Many employers restrict these offerings to the highest risk employees, thereby diminishing the effectiveness of the strategy. A preferred approach would be to offer a range of interpersonal support strategies, varying in intensity (perhaps depending on baseline weight status) to an entire population.
Comprehensive strategies	Fitness challenges, prompts to increase physical activity, improving worksite-based food choices and calorie labeling, walking programs, wellness expos	Comprehensive strategies are the most promising interventions (see reference note 40). Currently, <7% of U.S. workplaces offer comprehensive WHP programs that meet all five components (see reference note 41).	Comprehensive programs can be cost effective, but they do not generally result in cost savings (see reference note 42). Further, the economic value associated with weight loss may differentially accrue to parties other than the employer (e.g., health plans, health systems, and individuals).

factors.³² Increased participation in these programs is hampered by absent or inadequate coordination, as the legal and public health implications of these various strategies remained largely unexplored. Table 3 displays various types of WHP strategies and critiques effectiveness and potential problems associated with each.

Although the Fair Labor Standards Act does not require employers to offer wellness benefits or employee assistance programs, federal law incentivizes such activities through the establishment of policies aimed at encouraging the use of the workplace to improve health. As a general matter, the Health Insurance Portability and Accountability Act of 1996 prohibits employers from denying eligibility for employee benefits based on a health factor, or from varying ben-

efits, including variation in premiums and cost-sharing. An important exception, however, is the flexibility to vary premiums and cost-sharing for employees who satisfy the requirements of formal workplace wellness programs that meet federal standards³³ where participation can be linked to reduced premiums, cost-sharing, and other financial rewards.³⁴

Nonetheless, even when available, insurance coverage may be significantly limited due to high deductibles and coinsurance that hamper coverage for low-and moderate-income families. Employer-sponsored plans and private health insurance coverage may (particularly in the case of the small group and individual market) limit or exclude coverage for persons with underlying conditions, including obesity. These types of restrictions may be widespread.³⁵

Many approaches can circumvent obesogenic features in the workplace environment. Incentives can be used to promote active commuting, walking routes can be established both inside and outside of worksites, and breaks can be provided to allow employees to participate in physical activity.³⁶ Healthful foods can be offered in cafeterias and vending machine options and related pricing strategies can be designed to encourage the purchase of more healthful foods.³⁷ Employers might more frequently negotiate with health plans to reimburse participation in obesity intervention programs.

Health benefit coverage arrangements for comprehensive preventive health treatments blended with other types of employee assistance and benefit plan interventions that are permitted under federal and state employee benefit laws and that address health needs that are considered non-insurable, such as group nutrition counseling and exercise, represent promising targets. Federal and state lawmakers could consider a combination of grant and tax incentives to encourage these "extracontractual" benefits that complement more traditional health insurance coverage.

In this vein, the Medicare Modernization Act (MMA) of 200338 contained provisions whose purpose was to stimulate the market for tax-favored Health Savings Accounts (HSAs) linked to high deductible health plans. Since passage of the MMA, growth of the HSA/ high deductible plan market has been significant, with more than 6 million persons enrolled in HSA-style plans as of 2008.39 To the extent that individuals can use their savings accounts to subsidize the purchase of health, exercise, and nutrition services that aid in the prevention of obesity, this may offer a means of financing certain health interventions otherwise considered uninsurable. At the same time, this additional financial aid may be offset by high and unaffordable deductibles for uncovered services, as well as high cost-sharing. With this caveat, it is important to note that the use of employer-funded HSAs might be used to encourage employers and employees to make health investments not typically covered through insurance, such as weight-related programs (e.g., fitness center fees, nutritional counseling).

Finally, although extra-contractual health supports that complement insurance are important, *having* health insurance is key to assure that health consequences of obesity are identified and addressed as early as possible. Of particular importance is assuring comprehensive coverage for employees of lower socioeconomic standing, given their disproportionate burden of obesity,⁴⁰ associated comorbidities,⁴¹ and limited access to effective intervention options.⁴²

Summary of Gaps Related to Coordination of Legal-Based Efforts across Jurisdictions and Sectors

Coordination to address obesity requires effort implemented vertically and horizontally among government agencies, as well as between governments and regulatory commissions and private industry.

In the community, there are creative examples of government agencies working together to implement a coordinated approach to obesity prevention and control. HIAs, which augment environmental impact assessments in new development areas, inherently require coordination, and efforts to implement food bans and menu labeling are bridging health departments, local offices, and legislatures. While these activities represent progress, more cities and states must coordinate between agencies horizontally to succeed in adopting effective population-level obesity prevention and control strategies.

Progress is also clear in examples of successful vertical coordination between various levels of government. Improvements to the federal school lunch and breakfast programs, as well as SRTS programs, exemplify how laws and legal authorities created at the federal level result in progress at the local level. While these examples of coordination demonstrate improved programs, current legislation may be further refined to create access to healthier foods and develop more creative strategies for increasing physical activity for both children and adults.

Overweight and obesity cannot be effectively controlled without partnership between government and the private sector. Worksite health promotion programs provide one example where incentives to business have created opportunities for working populations to increase activity. Similarly, the Health Savings Accounts under the Medicare Modernization Act create tax incentives that allow individuals to purchase health, exercise, and nutrition services that otherwise may not be available. Private industry reacts positive to incentives programs and these examples merely represent the tip of the iceberg of available opportunities to build partnerships between government and the private sector for obesity prevention and control.

Perhaps the biggest gap in obesity prevention and control efforts with respect to coordination issues is the need for improvements in the regulatory structure that overseas insurance and third-party reimbursement. While the lion's share of obesity prevention and control efforts take place outside of the health care system, overweight and obesity contribute substantially to morbidity and health care costs in the U.S. Third-party reimbursement for health care relating

to overweight and obesity prevention based on sound scientific principles is a gap that must be addressed.

Conclusion

Coordination of legal-based efforts across jurisdictions and sectors, particularly between government agencies and private-sector partners, is a critical component to success in reversing current obesity trends. Each sector of society needs to buttress and reinforce opportunities to increase access to physical activity and healthy foods. By addressing obesegenic trends simultaneously across a spectrum of settings, we can reverse the current trends and commit to a healthy future.

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Assessing Information on Public Health Law Best Practices for Obesity Prevention and Control

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In 2008, Representative John Read of Mississippi recently co-sponsored state legislation that would ban restaurants from serving obese customers. He later admitted that the bill was a publicity stunt, meant to "shed a little light on the number one problem in Mississippi." Although controversial, Read's bill exemplifies both the current perception of obesity as a national public health problem and the general sentiment underlying the types of interventions that are being considered to address this issue. The proposed legislation also demonstrates how policymakers can use or, in this case misuse, information about obesity to generate significant discussion on an issue along with ill-conceived legal interventions.

Information sharing and the methods used to share best practices are components of the fourth core element of public health legal preparedness. The way public health practitioners, health care providers, attorneys, and legislators share information or have access to information is critical for ensuring that laws and legal authority support best practices that address the complex public health issue of obesity.

Few people, especially health care and public health professionals, will disagree about the negative health consequences and substantial health care costs associated with obesity.³ Nonetheless, because obesity is often perceived as a failure of individual-control

overeating and exercise habits, existing health policy tends to focus on individual behavior modification rather than a population health issue. As the companion public health framework paper demonstrates, body weight results from complex, multifaceted causal factors that involve far more than individual genes and behavior. The built environment (i.e., sidewalks, parks, and transportation), social determinants of health, a family's economic status, and home environment also affect body weight. For example, the Surgeon General has found that behavior and environment contribute to obesity and emphasizes that policy should address both of these areas.⁴

Various laws and legal authorities directly and indirectly regulate many (if not most) of the factors influencing obesity rates, such as food production, distribution, eating, and exercise. Therefore, it is important for public health and health care practitioners to share information with elected officials and other policymakers to develop sound public policy to reduce the incidence and prevalence of obesity. Legislators and practitioners seeking to improve policies and programs related to obesity prevention and control must have ready access to evidence-based information to support laws and implement programs that can have a long-term impact in reducing obesity as a chronic disease.

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JLME SUPPLEMENT Jacobson, Kim, and Tortolero

This paper examines existing legal strategies designed to curtail the obesity epidemic. Three questions frame our analysis: What do we want law to achieve in this area? Where can law make the greatest difference? And what information do policymakers and practitioners need to shape and implement programs that reflect best practices? Without reciprocal information sharing strategies between policymakers and public health practitioners, it is difficult to enact effective legal innovations and best practices to curtail the obesity epidemic. To frame the discussion, the paper describes laws and legal authorities that influence obesity prevention and control, and then discusses the information strategies from various sectors needed to ensure dissemination of best practices for legal interventions designed to reduce obesity.

Information Resources: An Assessment

The public health initiative to prevent tobacco use has rich information resources, decades of research, and a strong scientific foundation for the development of laws and legal authorities. By contrast, the resources to address obesity from a population-based, public health perspective are not nearly as developed. While numerous sources of obesity-related information exist and more are developing, there is no coordinated approach to information management or dissemination, nor is there a centralized repository for use by lawmakers, practitioners, and policymakers. One problem is that obesity is such a growing and complex problem that it is not clear who represents the total "base" of stakeholders. A table in the appendix of this supplement presents a list of information resources currently available that begins to describe laws and legal authorities as well as policy resources available for information sharing about legal practices related to obesity prevention and control.

Despite the limited information base and information sharing, states and localities have already enacted laws and ordinances to address obesity. Currently, as reported in the laws and legal authorities assessment paper, sectors at all jurisdictional levels are implementing laws that make healthy food choices more available and encourage exercise. At the present time, these laws, regulations, and policies generally do not encourage the kinds of surveillance, monitoring, and evaluation needed to assess the impact of various program strategies and laws that attempt to address the obesity epidemic. As these laws and policies continue to evolve, they will generate the information base needed to assess best legal practices.

Setting-Specific Information Dissemination *a. Schools*

In theory, laws and legal authorities supporting prevention strategies are most effective because, if successful, they can eliminate a given problem (e.g., the availability of sugar-sweetened beverages on school property and during school events, or the lack of fruits and vegetables in entire communities). To prevent obesity, most strategies have been directed at children through school-based interventions. Children represent an attractive target population to policymakers because laws and legal authorities to improve children's health enjoy widespread public and bipartisan support, and thus are often easier to enact.

Lawmakers and policymakers believe that early intervention programs have superior outcomes than those directed at adults. The eating and physical activity habits of children are not yet ingrained, making them more susceptible to behavior modification and population-based strategies. School-based programs are especially popular because schools are an efficient medium to reach large numbers of children and legislators can easily mandate school-based programs, such as those that regulate nutrition and physical exercise.

Surveys and information sharing in the school setting are contributing to our knowledge base and influencing laws that authorize programs, especially at the federal level. These surveys demonstrate the potential for effective use of information sharing to identify where laws are making an impact and where improvement is still needed.

For example, surveys suggest that only 28% of high school students participate in daily physical education programs and that some schools have foregone physical education requirements altogether. As noted in the laws and legal authorities assessment paper, surveys have noted that schools are relying too heavily on inexpensive commodity foods high in salt, fat, and calories. As a result, the federal government in 2004 mandated that every local educational agency participating in the National School Lunch Program and the School Breakfast Program "shall establish a local school wellness policy by School Year 2006."7 Local wellness policies must establish goals for nutrition education, physical activity, campus food provision, and other school-based activities designed to promote student wellness.8 A 2007 survey of how these policies were implemented found that many school districts continued to struggle with both the availability and pricing of products that meet nutrition standards.9

For many years, schools have offered foods of minimal nutritional value. Because of these policies, schools have been highly criticized as contributing to the "toxic environment" associated with obesity. Oschool-based

policies rarely consider the home environment of their students or take into account their students' cultural diversity. Parents may want their children to be at a healthy weight, but may themselves lack the appropriate tools to achieve this outcome. Parental perception of what constitutes healthy weight may deviate from that of health care providers. Lower-income parents often believe that their overweight or obese child is either normal weight or even underweight. An overweight child is seen as a sign of good parenting in some social and cultural contexts. Thus, methods for information sharing and determining best practices must be diverse and consider stakeholders who represent a wide variety of cultures interests, sectors, and populations.

Most of the legislation addressing obesity is developed at the state and local levels. For example, some school districts in the country are using newly implemented laws and or their existing legal authorities to improve nutrition, increase physical education programs, and monitor childhood obesity through BMI screening. A watershed year for such legislation, 2005, saw the passage of 17 state statutes relating to schoolbased nutrition and 21 related to physical education programs.¹³ Other legislation includes restricting access to vending machines,14 and introducing fresh, locally grown produce into school nutrition programs.¹⁵ To date, states have not imposed advertising and marketing limits on products that contribute to obesity rates, though we can anticipate such attempts in the future.16 In part because the laws have not yet been evaluated, they have not been widely adopted throughout the country.

In 2003, Arkansas was the first state to legislate statewide BMI measurements with school health report cards.¹⁷ These report cards provide parents with their child's BMI percentage by age, and the results of vision and hearing screening.18 If the child is considered at risk for being overweight or is overweight or underweight, parents are provided local resources and contact information for potential health care providers.¹⁹ The Arkansas program has had a mixed reception from parents, health practitioners, and the media. Critics of program have raised self-esteem, stigmatization, and disordered eating concerns.20 In 2005 and 2007, bills were proposed to repeal the controversial law, but neither was enacted. Instead, in 2007, a law was enacted which changes the frequency of BMI screening (from every year to every other year), and allows parents to opt their children out from screening.²¹

b. Community Setting

State and local jurisdictions may represent the cutting edge for demonstrating potentially innovative legal strategies to prevent and control obesity. Throughout the nation, state and local jurisdictions are enacting prevention-focused initiatives, including the creation of local obesity task forces, along with community and workplace fitness campaigns.²² Unfortunately, the successes and failures associated with these programs at the local level are neither adequately evaluated to identify model programs nor are the lessons learned communicated widely.

Some of the initiatives are contentious. For example, taxes on non-nutritious foods or "snack taxes" have been levied in seventeen states.²³ Some public health officials use the parallel of the positive impact of tobacco taxes in reducing smoking as a model for taxing snack foods and sodas to promote healthier behavior.24 But these taxes are quite controversial and untested as to whether they make a significant impact on obesity prevention and control. Any evaluation of the potential positive effects on reducing the prevalence of obesity must be balanced against what opponents argue is the regressive nature of junk food, i.e., taxes are unlikely to encourage the substitution of healthier foods.²⁵ The level of disagreement about the issue demonstrates the need for further study and a significant gap in our understanding of this legal strategy as a best practice.

Federal law also affects the range of actions that states and localities may take. For instance, the Nutrition Labeling and Education Act (NLEA) of 1990 requires a nutrition facts label on most food products²⁶ and stipulates that 15 items appear on labels at all times. These items include serving size, servings per container, calories and calories from fat, cholesterol, sodium, carbohydrates, and fats. In 2006, the FDA required the fat category to include the explicit breakdown between saturated fat and trans fat.27 Empirical evidence suggests that access to this information has made consumers, as a whole, more discriminating about their food choices.²⁸ Individuals who use food labels typically have better eating habits, with lower consumption of fat, and higher consumption of fruit and vegetables, compared to those who do not use food labels.²⁹ Yet labels remain difficult to understand for many and their complexity remains a barrier to making good food choices.

In any event, not all food manufacturers and distributors are subject to NLEA's requirements. For example, restaurants have historically been exempted from regulation. This exception has been called into question because of the dramatic increase of meals purchased in food establishments. The average American consumes approximately one-third of their calories from food purchased outside the home,³⁰ and many food products available in restaurants have excessive

amounts of sodium, cholesterol, and total fat (saturated and trans fatty acids).

To address the limited nutritional information available to consumers at the point of purchase, states and localities have proposed labeling and caloriecount requirements in restaurants. But only one state (California) and a handful of localities (King County, Washington; San Francisco and Santa Clara County, California; and New York City) have succeeded in passing such legislation.³¹ After overcoming the state restaurant association's challenge in court in May 2008, the New York City Health Department started issuing citations to chain restaurants that were not posting calorie counts on their menus. 32 New York and other cities, including Boston, have approved local trans fat bans. Studies have shown that a high intake of trans fat is associated with the risk of weight gain and gain in abdominal fatness.33 While evaluation studies of these programs are under way, they have not yet resulted in widespread knowledge of the impact these legal strategies may have on obesity prevention and control.

State and local jurisdictions are also pursuing non-traditional partnerships that may emanate from the planning department instead of the public health department or the transportation department instead of the health care setting. A handful of state policies address the built environment. Critics of contemporary urban planning decry residential sprawl, which discourages physical activity and instead increases dependency on automobiles for mobility.³⁴ Some commentators have posited creative zoning solutions, such as mixed-use solutions,³⁵ which encourage the melding of commercial and residential communities to provide individuals with the opportunity to walk or bike to retail centers and their places of employment.

Perhaps the most aggressive use of law and legal authority to reduce obesity has emanated from New York City. Aside from the calorie posting requirement described above, in 2006, New York City promulgated a regulation requiring testing labs in the city to report the test results of all hemoglobin A1c diabetes test subjects to the New York City Department of Health and Mental Hygiene (NYDOH). The City intends to use these test results to address the growing diabetes outbreak among its residents. But the registry raises potential concerns for protecting privacy and confidentiality.36 At present, there are no indications that NYDOH plans to add obesity to the registry, and the code imposes strict privacy/confidentiality protections. Still, the relationship between diabetes and obesity presents an opportunity for a state or municipality to track the risk of diabetes with obesity. As a result, individuals with both diseases risk disclosure of their private data.

Another non-traditional approach is Pennsylvania's "Fresh Food Financing Initiative" (FFFI), a public-private partnership to encourage supermarket development in low-income areas.³⁷ Low-income residents often lack easy access to grocery stores to buy nutritious foods. This lack of access to healthy food is directly linked to higher rates of obesity. FFFI supplements the financing needs of supermarket operators that plan to operate in underserved communities where infrastructure costs and credit needs cannot be met through conventional financial institutions.³⁸ As of 2007, FFFI had committed resources to 50 supermarket projects across the state.³⁹ The program has received considerable positive attention, but has not yet been evaluated. Other states have also increased space and funding opportunities for local farmers' markets.⁴⁰ However, until systems are in place to promote widespread discussion of these legal strategies, they remain no more than case studies of promising programs that are destined to remain localized, independent, and unreplicated.

c. Health Care Setting

Currently, third-party reimbursement for obesity prevention and control is limited. Although prior research demonstrates that doctors and other health care providers can have a significant influence on their patients, state law provides few incentives to the medical care system for obesity prevention. It is only when the condition requires extensive and expensive treatment options that coverage is available.

In addition to prevention strategies, policymakers have considered and implemented legal strategies related to treatment interventions. As of July 2004, the Centers for Medicare and Medicaid Services (CMS) officially recognized obesity as a legitimate medical condition, which led to increased coverage for scientifically effective obesity treatments. 41 Several states have implemented treatment programs through their Medicaid programs. For example, West Virginia and Tennessee offer full and partial reimbursement for Weight Watchers programs,42 and 42 states offer gastric bypass surgery for the morbidly obese (i.e., BMI of greater than 40).43 As of 2006, 17 states offered coverage of weight-loss drugs if a patient met the criteria for being diagnosed with a health condition such as Type 2 diabetes, hperlipidemia, or morbid obesity.44

Federal and state policymakers have also proposed legislation to encourage or mandate private health insurers to provide coverage for obesity treatment, such as medical nutritional therapy and bariatric surgery for the morbidly obese. Maryland requires insurers to cover morbid obesity treatment, including surgery, while Georgia, Indiana, and Virginia require

private insurers to offer general coverage for morbid obesity as an option.⁴⁵

Gap Analysis

Unfortunately, very few of the existing legal strategies have been rigorously evaluated, making it difficult to identify the best legal practices to curtail obesity. At this point, we are unable to say whether legal interventions have facilitated obesity prevention. The resulting gaps in our knowledge base need to be addressed.

Lawmakers and policymakers have not invested in research and rigorous program evaluations of existing legal strategies to establish which ones are effective and cost-effective at a population level. When such empirical research is conducted, best practices will begin to emerge. Until then, substantial gaps in identifying best legal practices will remain.

To be sure, lawmakers cannot easily wait for full evaluation results before taking action. But just doing something is not necessarily a better alternative. It is not likely that legislators will continue to enact new laws if obesity rates continue to escalate and doing so may come at the expense of implementing superior alternatives.

Thus, stakeholders at all jurisdictional levels and among interested sectors should evaluate their current status for sharing information and identifying best and promising practices. Advocates need to make choices about which laws to pursue. To move forward, we need to identify the following: criteria for deciding which laws are most beneficial and cost-effective; information about the types and scope of laws and regulations that could be considered; methodologies to evaluate existing laws; interventions that other state agencies can implement; benchmarks for legal preparedness for obesity prevention; and how to disseminate information to practitioners about the most effective legal practices.

In the interim, local health departments (LHDs) can use their broad authority to issue regulations with clear plans to assess their progress. That way, successful experiments can be replicated across departments, and unsuccessful ones can be abandoned. While there is evidence about what works at the individual level—education, better nutrition, and increased physical activity—these are hard to implement effectively at the population level, but at least provide a starting point. ⁴⁶ Indeed, maintaining individual behavior change is difficult. Even with intense scrutiny from physicians, many people fail to achieve their weightloss goals or eventually regress back to their former, unhealthy behaviors. This demonstrates the complexity of the issue and the role environments play.

Obesity is rooted in more than individual behavior; the built environment plays an equally large causal role. Current policies in this area are admirable, but increasing access to bicycle paths and neighborhood farmer's markets are tangential solutions that do not address the ingrained problems of the built environment. The 15 states with the highest levels of obesity are concentrated in the South and include the poorest states in the country.⁴⁷ The greatest increases of obesity have occurred among low-income black and non-white Hispanic women.⁴⁸ Census data indicate that low-income, minority populations are concentrated in densely populated, high-crime, inner cities or extremely rural areas.⁴⁹ Our research about efforts in these settings and communication efforts to share best practices is severely lacking.

Poverty, racism, crime, inefficient urban planning, lack of public transportation, discriminatory zoning and housing policies all contribute to the deficiencies of the built environment. Lawmakers who seek tangible change will implement legal strategies that confront and rectify these structural and social failures.

The absence of benchmarks for best legal practices suggests that an immediate need is to develop and disseminate the information base that will enable states and localities to develop appropriate interventions. Indeed, one might argue that a multitude of state and local experiments that are subsequently evaluated and disseminated will provide the needed information base to use law effectively to reduce obesity rates.⁵⁰ Until the benchmarks are identified, lawmakers will need to use the best available information to make decisions.

As noted above, we believe that a focus on the built environment is likely to achieve substantial gains in reducing obesity. Legal strategies should include incentives to facilitate individual behavioral change and simultaneously stimulate cultural change in behaviors that individuals can control. Steady changes in cultural attitudes played a significant role in reducing adult smoking, youth tobacco initiation rates, and smoking in public places. Legal intervention played an important role in facilitating those cultural changes, which needs to be replicated in reducing obesity rates.

In sum, we suggest the following strategies for determining best legal practices:

- Develop criteria and methodologies to determine laws' benefits/cost-effectiveness and consistency with important legal principles;
- Catalog types/scope of laws/regulations to pursue;
- Determine whether the law is enforceable;

- Design benchmarks for legal preparedness;
- Disseminate effective practices (through manuals, fact-sheets, etc., for ready reference); and
- Encourage local health departments to issue regulations and assess programs.

Taken together, these efforts will result in a more effective information base for adopting best legal practices to reduce obesity rates.

Conclusion

Undoubtedly, law (especially public health law) has the inherent power to influence obesity in profound ways. But enacting laws may not solve the underlying factors driving the obesity epidemic. Beyond issues of personal responsibility, genetics, culture, the built environment, education, and income are contributing factors to the obesity epidemic. Law can certainly address some of these factors and lead to reduced obesity rates. Indeed, law can be integral to developing solutions once we identify the optimal legal strategies to pursue and disseminate that information widely. Yet expecting the legal system to resolve the complex interaction of these factors is unrealistic.

Lawmakers and other people interested in obesity prevention and control have a compelling need for improved information about best practices. Lawmakers should be afforded the opportunity to have comprehensive and scientifically sound information readily available. At present, there is no efficient strategy based in the law to ensure the effective use of this information or a central repository for access. Benchmarks, systematic baseline assessment of current laws and legal authorities, and a sustained program of applied research on strategies are currently unavailable, but should be a high priority if laws are to have a significant impact on reducing the obesity epidemic.

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Improving Laws and Legal Authorities for Obesity Prevention and Control

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This paper is one of four interrelated action papers resulting from the 2008 National Summit on Legal Preparedness for Obesity Prevention and Control. Summit participants engaged in discussions on the current state of the law with respect to obesity, nutrition and food policy, physical activity, and physical education. Participants also identified gaps in the law at all jurisdictional levels and relevant to numerous sectors and disciplines that have a stake in obesity prevention and control.

The companion paper, "Assessment of Laws and Legal Authorities for Obesity Prevention and Control," identified numerous laws and policies enacted to target the three domains of healthy lifestyles, healthy places, and healthy societies. That paper identified several gaps in the law that require attention and action. This paper addresses those gaps and presents applicable laws and legal authorities that public health professionals and lawyers can consider to implement to close the gaps.

Public health legal preparedness is the "attainment by a public health system of specified legal benchmarks or standards essential to the preparedness of the public health system."² Public health systems vary depending on the health issue confronted but nearly always include public health and legal practitioners along with relevant setting and sector stakeholders. The goal of this paper is to present action items for law and policymakers and public health practitioners at the federal, tribal, state, local, and community levels to consider when developing, implementing, and evaluating obesity prevention and control strategies and interventions.

This paper will define legal action items for those working within the different public health systems to use to assure the conditions in which people can be healthy. Like the companion paper, this paper is divided by the three vital domains: Healthy Lifestyles, Healthy Places, and Healthy Societies. Specific action options are provided under each domain and the table provides a broader list of relevant options developed at the Summit.

Healthy Lifestyles

Healthy lifestyles exist when the environment facilitates physical activity and healthy food choices.³ The goal of this domain is to make the default environment one that fosters healthy lifestyles.

Access to Healthy Food

The overarching contributors to choosing healthy foods are the cost, quantity, and quality of the food supply. One factor to the general make-up and relative pricing of food in the U.S. is due in large part to the farm subsidies established and maintained under

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the Farm Bill. Under this crucial piece of legislation, the USDA provides substantial agricultural subsidies,⁴ primarily for major commodity crops such as corn, soy, wheat, and cotton.⁵ As a result, these crops are available in a relative abundance, and this drives down their price as well as that of the foods and beverages manufactured with them and livestock reared on them. The overabundance and economic incentives to eat calorie-dense, nutrient-poor foods have proven to be obesogenic and a contributor to the public health problems in the country. From 1985 to 2000, the price of fruits and vegetables in the U.S. rose 117%, compared to 46% for sweets and desserts and 20% for soft drinks.⁶

Reconsideration of farm subsidies has been raised fervently in recent years and Summit participants advocated subsidizing a variety of vegetables and fruits, and foods such as nuts, legumes, and animals raised on food they naturally eat (instead of corn), in order to shift the U.S. diet in a healthier direction. Studies in Iowa show that farmers who produce commodity crops operate at a net loss⁷ and that both farmers and the state's economy would benefit from increasing the production of fruit and vegetables,⁸ which could also result in decreased produce prices and increased consumption.

However, states and local governments need not wait on the reauthorization of the federal Farm Bill to encourage healthy lifestyles in their communities. The food environment - i.e., the ratio of fast food restaurants to grocery stores to convenience stores, access to and availability of fresh food, prevalence of liquor stores and food desserts — contributes to, or is a barrier to healthy eating and a healthy weight.9 Low-income communities have one-third to one-half the number of supermarkets found in more affluent neighborhoods, but twice as many small markets or corner stores that are less likely to carry produce and other healthy items and are often relatively more expensive.¹⁰ Studies show that the proximity one lives to stores that carry fresh vegetables is positively related to the person's intake of vegetables.¹¹ Conversely, fastfood outlets across neighborhoods are negatively associated with residents' health outcomes, in that a greater distribution of fast-food restaurants is associated with a greater prevalence of overweight/obesity among neighborhood residents.12

The built environment is composed of several relevant variables including the land-use mix, street connectivity, the accessibility of fast-food outlets, grocery stores, farmers' markets, public transit stations, and green and open spaces — all malleable by local governments. Applicable legal action items are discussed further in the Healthy Places section.

Marketing

The Federal Trade Commission (FTC) subpoenaed 44 food and beverage companies to analyze their marketing practices directed at children and adolescents¹⁴ and found that they spent almost \$2 billion targeting youth in 2006 alone.15 Critically, the FTC found that carbonated beverages, quick service restaurant food and breakfast cereals accounted for 65% of the total amount spent on marketing to youth ages 2-17 by these companies.¹⁶ The associated food and beverages are most often nutrient poor but high in saturated fat, sugar, and sodium. This is concerning because studies indicate that food advertising increases children's consumption of advertised foods in the short term, children's preferences for the foods advertised, and their requests to parents for those foods at both the brand and the category level.¹⁷

Although the FTC is the federal agency responsible for regulating the advertisement of foods and beverages, ¹⁸ it does not have the authority to regulate unfair marketing practices directed at children. In 1978, the FTC initiated proposed rulemaking, called KidVid, based on the evidence that the televised advertising of sugared products to children of all ages may be unfair and deceptive under the FTC Act. ¹⁹ In the face of strong opposition, Congress withdrew the FTC's authority to regulate advertising to children under the "unfair" prong of the FTC Act and this regulatory gap remains today. ²⁰ However, the FTC retains authority to promulgate rules on the subject under the "deceptive" prong of the Act. ²¹ The FTC has not attempted such action.

Scientific evidence strongly suggests that the FTC should utilize its authority to regulate marketing to children as deceptive.22 The IOM found that "[m]ost children ages 8 years and under do not effectively comprehend the persuasive intent of marketing messages, and most children ages 4 years and under cannot consistently discriminate between television advertising and programming."23 Likewise, the American Psychological Association's Task Force on Advertising and Children found that "[c]hildren below age 7-8 years tend to accept commercial claims and appeals as truthful and accurate because they fail to comprehend the advertiser's motive to exaggerate and embellish."24 Even for older children, newer forms of marketing, including product placements, viral marketing, and sponsorships deactivate their ability to process advertising information, thereby reducing potential skepticism and other defenses.²⁵ In addition, the FTC's ability to protect children from unfair marketing practices should be restored so it can address the reality of the current marketing environment.

Table

Improving Laws and Legal Authorities

LAWS/REGULATIONS/ POLICIES	PUBLIC HEALTH ISSUE	SETTING	BEHAVIOR AREA
Americans with Disabilities Act (ADA)	Civil rights protections to individuals with disabilities in the areas of public accomodation, public services, transportation, education, employment, and telecommunication	Community; Health care; Schools; Worksites	Social justice: health access, health disparities, disability
Breastfeeding Promotion Program	Encourages breastfeeding under the child nutrition program	Worksites; Hospitals	Nutrition
Child Nutrition and WIC Reauthorization	Encompasses several food programs relating to food insecurity, child and maternal health, and access to healthy food. School wellness policies also developed under Act.	Community; School	Nutrition
Deficit Reduction Act (DRA)	Provides states with flexibility to reform their Medicaid programs	Health care	Healthcare
Employment Retirement Income Security Act (ERISA)	Ensures health plan coverage for retirees and qualified beneficiaries	Worksites	Social justice: health access, health disparities, disability
Federal Trade Commission Act (FTC Act)	Regulates food advertising	Community	Nutrition, Child protection
Food Conservation, and Energy Act (Farm Bill)	Access to and supply of healthful foods	Community	Nutrition
National School Breakfast Program (SBP)	Cash assistance to states to operate nonprofit breakfast program to schools and residential childcare facilitites	Schools	Nutrition
National School Lunch Program (NSLP)	Nutritionally balanced meals at schools and residential childcare facilitites	Schools	Nutrition
No Child Left Behind (NCLB)	Addresses risk factor for disease: low educational attainment and thus, higher likelihood of low SES in adulthood	Schools	Physical Activity; Education
Nutrition Labeling Education Act (NLEA)	Labeling of content, nutritional value and place of manufacture for food items regulated by the FDA	Community	Nutrition
Pregnancy Discrimination Act	Modifies the Civil Rights Act to protect breastfeeding by new mothers; provide tax incentives to employers to encourage breastfeeding by employees; and provide a performance standard for breastpumps	Community; Health care; Worksites	Nutrition
Safe Accountable Flexible Efficient Transportation Equity Act (SAFETEA or Transportation Bill)	Safe and accessible opportunities to commute, travel and engage in PA	Community	Physical Activity
School Bullying Policies	Discrimination against overweight children	Schools	Child protection
Social Security Act	Provides disability insurance	Health care	Healthcare
Zoning	Determines whether land use favors physical activity and access to healthy foods	Community	Nutrition; Physical Activity

GAP/CHALLENGES	ACTION OPTIONS
Morbid obesity not recognized as disabling even when it is; ADA definitions require physiological cause	Revise to include coverage for morbid obesity that results in disability (without the need for other physiological causes). Educate policymakers about the etiology of obesity. Bring claims under the third prong of the ADA Amendment Act of 2008's "regarded as" section when discrimination occurs because person is thought to be disabled by their weight.
Does not make any specific recommendations or requirements to develop environments in which women can safely and privately BF; Formula distributed to mothers in hospitals after childbirth	Develop standards for accomodation. Make physician's prescriptions required to obtain formula in a hospital setting.
Coordination with healthcare sectors, diverging demographics and needs of participants, and access to healthful food choices. Unhealthy foods allowed under EBT program.	Permit and reimburse farmers/local growers to participate through use and acess of wireless payment equipment. Restrict EBT funds to nutritionally positive foods and beverages. Expand and update the definition of Foods of Minimal Nutritional Value and revise to include the entire school day and campus. Strengthen school wellness policies and increase monitoring and enforcement of them.
Providers not adequately reimbursed under Medicaid for obesity- related visits so disease goes untreated and preventative measures not explored	Provide clear reimbursement codes for obesity prevention, control and treatment, including surgery for the morbidly obese. Create medical homes for Medicaid beneficiaries.
Costly COBRA benefits mean many are without healthcare coverage if laid off or upon retirement	Consider universal health care to relieve burden on employers and share cost among tax payers
Congress withdrew the FTC's ability to regulate "unfair" market- ing/advertising to children so children inundated with ads for nutritionally poor foods and fast food establishments	The FTC should proceed under the "deceptive" prong, and Congress should restore the FTC's authority to regulate "unfair" marketing/advertising to children. The FTC should develop strong uniform nutrition standards to be applied to marketing directed at children.
Subsidizes foods of poor or minimal nutritional quality	Provide subsidies for the production and supply of domestic fruits and vegetables for domestic consumption. Reform subsidization of commodity crops
Heavily favors packaged foods which are normally produced with excessive amounts of sugar, high fructose corn syrup, and/or salt	Require and specify foods of nutritional value that can be provided during breakfast whether through school system or outside vendors; schools and districts to adopt restrive policies on competitive foods
Heavily favors packaged foods which are normally produced with excessive amounts of sugar, high fructose corn syrup, and/or salt; Minimal restrictions on sales of competitive foods	Permit schools to use non USDA provided foods as long as exceed minimal nutritional value and support the use of farm to school vendor contracts; school districts to implement their own policies restricting competitive foods.
Does not require PA, PE, or health education as part of the curricula requirements	Modify to require PA, PE, and health education for all students in all grade levels per the physical activity guidelines and NASPE recommendations
Nutrition Facts Panel requirements do not apply to food service establishments. Food companies place diverse and uninformative symbols on the front of packaging, some touting low nutritional standards. No daily recommended value for sugar established.	Include recommended daily value of added sugars on Nutrition Facts Panel; Expand to require disclosure of nutritient content in quick service restaurants; states and locales enact menu label laws. Standardize front of package quick reference symbols.
Does not require the provision of lactation rooms for breastfeeding mothers	Develop standards for accomodation either mandating lactation rooms based on a formula or for implementation in the event an employer chooses to provide such services.
Focus on vehicular modes of transportation and limited if any consideration to safe routes, sidewalks, pedestrian and bicycle ways	Increase funding when SAFETEA-LU is reauthorized.Advocate for dedicated source of funding for transit at state level.At local level, funding must be sufficient to qualify for the federal match of funds (20 percent must be provided).
Schools lack anti-bullying policies or enforcement mechanisms for existing policies	Enact anti-bullying policies that specifically address weight bias and institute enforcement mechanisms.
In October of 1999 deleted obesity from the recognized list of disabling conditions	Modify SSA to cover preventive (primary) and treatment (seondary and tertary) services for obesity for children and adults.
Most often created without public health considerations	Zone fast-food restaurants out of residential areas, zone in grocery stores and farmers markets. Zone, build, and coordinate green open spaces, safe roughts to school, sidewalks and recreation paths.

In the absence of federal intervention, some states have consumer protection laws, under which a private litigant or the attorney general can bring a claim of unfair, misleading, or deceptive acts or practices.²⁶ Further, school districts can limit the amount of marketing directed at children in school facilities and campuses, as discussed below.

Healthy Places

Laws and policies targeting Healthy Places address the main locus of intervention, including community, workplace, business, and transportation.²⁷ This paper provides selected examples in different settings to recommend action items intended to ensure individuals can make healthy lifestyle choices where they are.

Zoning and the Built Environment

The United States Supreme Court upheld zoning to protect public health as a proper exercise of the government's traditional police power.28 Government officials can alter the built environment through zoning to advance their community's public health. Possible zoning ordinances to improve the availability of fresh foods at lower prices include zoning land-use for grocery stores and farmers' markets.²⁹ Zoning strategies to reduce the availability of unhealthy options include banning fast food outlets, drive-through service and/ or formula restaurants, or zoning the density of fast food outlets through per unit space or through spacing requirements, and zoning fast-food outlets into or out of certain districts.³⁰ For example, despite the nearly universal availability of school-provided lunch in schools, a significant percentage of high school students go offcampus to eat lunch.31 Zoning fast-food establishments away from high schools could have an impact on the quality of foods and beverages accessible and thus, consumed by these students during the school day.

The built environment also contributes to the ability of residents to engage in physical activity, for necessity, recreation, and play.³² For children, this means more safe routes to school, safe playgrounds and open green spaces to play. For adults, the Surgeon General recommends they engage in at least 30 minutes of moderate physical activity daily. Notwithstanding these recommendations, research reveals that at least half of American adults do not meet the guidelines³³ and that many in fact lead sedentary lifestyles.³⁴

Researchers and Summit participants identified societal factors that affect levels of physical activity, which include individual characteristics (demographics, household, and lifestyle characteristics, culture, time allocation, etc.); the built environment (land use patterns, transportation systems, and design features); and the social environment (societal values and pref-

erences, public policies, and economic forces).³⁵ Adult physical activity levels have declined in large part due to reduced demand for daily physical activity in leisure and in travel. The modern reliance on automobiles is being challenged by rising gas prices, environmental concerns, road congestion, increasing obesity, and decreasing physical fitness. Thus, a shift to more ubiquitous and affordable public transportation is necessary. Increased access to public transportation often provides opportunities for physical activity because most transit trips begin and/or end with walking.³⁶

The "walkability" of a community is a key index of its healthiness. Results from a CDC study suggest that Americans who walk to and from public transit obtain an appreciable amount of daily transit-related physical activity (median of 19 minutes), with 29% of transit walkers achieving 30 or more minutes of daily physical activity solely during the commute.³⁷ Importantly, it has been shown that walking and other less vigorous forms of physical activity are easier to sustain over time.³⁸ Pedestrian improvements — e.g., sidewalks, marked crosswalks, and street amenities – encourage both walking and transit use. Local governments can also require that all new construction accommodate pedestrians, and also wheelchairs, bicycles, and strollers.

Transportation

Public transit is currently seeing record-high ridership, with more than 10.3 billion riders annually, and the demand is expected to continue as gas prices remain high.³⁹ For public transportation to grow and meet the rising demand, more funding will be required from federal, state, and local sources. Rising fuel costs and the need to upgrade vehicles and deploy information technology are driving up public transportation costs across the country. New and expanded revenue sources must be identified.

Transit systems are funded by multiple sources. Most get substantial annual funds from the federal government — called "formula" funds because they are based on population — and many also get discretionary funds for bus purchases. The discretionary funds are often referred to as earmarks. The single most important role public health advocates can play in supporting public transportation is to push for additional funding under the federal six-year transportation bill that will expire in November 2009. This bill, called the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) is the primary federal legislation that authorizes programming, sets priorities, and allocates funds over a six-year period for all modes of transportation. The reauthorization of this bill is an opportunity to provide new funding mechanisms and significant increases in federal funding for public transportation.⁴⁰

The current transportation bill for 2004-2009 included about \$53 billion for public transportation.⁴¹ Advocates say that figure will need to be increased substantially to supply the country with safe and efficient public transportation throughout the urban communities and into rural areas as well.⁴²

Funding at the state and local levels vary widely from state to state and city to city. Some states provide a dedicated source of funding for public transportation; in those states the level of funding must rise to meet the growing demand.⁴³ In states without a dedicated source of funding, the situation is dire as pressures for limited funds intensify. In those states, public transportation advocates would be well-advised to push for a dedicated funding source for transit and additional tools for generating revenues.⁴⁴

At the local level, many agencies have a consistent revenue stream through a local sales tax or, occasionally, an income tax or other fees. Since federal funds require that a local match of 20 percent be provided, it is critical that state and local funds be sufficient to provide the match needed to qualify for federal funds.

Costs associated with the development of public transportation can be offset by factors that promote more active lifestyles, such as the following: (1) property development activities around planned transit stations; (2) decreased air pollution; and (3) potential health benefits related to increased exercise for residents living in the surrounding communities. ⁴⁵ Laws and policies that increase access to public transportation also improve economic opportunities in distressed communities and increase the ability for those in lower socioeconomic areas to access grocery stores, community facilities, and employment opportunities. ⁴⁶

Workplaces

The U.S. Census reports that in 2006, for which most current data is available, 59.7 percent of the U.S. population received health care coverage through an employer sponsored plan.⁴⁷ The Centers for Medicare and Medicaid Services reported that in 2007 health care spending represented 16.2 percent of the Gross Domestic Product (GDP).48 The CDC estimates that obesity-related conditions cost employers \$117 billion in medical care and lost productivity annually;49 this accounts for a 25% increase in medical costs between 1987 and 2001.50 The priority of reducing health care costs has led many employers to implement workplace health promotion activities that (a) maintain employees' positive health behaviors, (b) reduce employees' risk for chronic diseases, and (c) improve employees' ability to self-manage those diseases. For instance,

workplaces use cost calculators such as that provided through CDC's LEAN for Life Web site⁵¹ and health impact assessments to determine disease burden and return on investment of programming, implement initiatives to promote physical activity such as stairwells with paintings and music, onsite gyms, walking trails and green spaces, and improve employee diets by offering healthier foods in vending machines and cafeterias. Uptake of such programs is bolstered by studies demonstrating that healthier employees use less health care dollars, are absent less, and are happier employees.⁵²

Workplace health promotion programs are primarily preventive in nature and have great potential to yield high cost savings through reduced direct expenditures for health care, workers' compensation, and disability payments, while simultaneously reducing absenteeism and increasing worker productivity.⁵³ Employers should demand that their health insurance plans cover preventive interventions such as nutritional counseling and social support groups, gym membership when exercise is prescribed by a physician, specialized foods when prescribed by a physician, in addition to any treatment interventions recommended by medical care providers. Further, because both employers and health insurance companies have a financial interest and stake in the wellbeing of their covered employees, they should partner to reduce health care costs by improving the insured's health.

The government should also create incentives for business to promote health. It can also accomplish this by providing tax credits for businesses that offer health care and physical activity programs shown to be effective. The government should also increase the benefit amount allowable for reimbursement of public transportation use because more employees may be likely to take public transportation if they get tax incentives to do so.

Healthy Society

Healthy Societies result from the pursuit of justice as a condition of societal change at multiple levels to improve access to services, reduce disparities, and eliminate discrimination.⁵⁴ For children, this domain includes schools because schools are a microcosm of their society and provide a support safety net for many children, especially those in greatest need.

Schools

School should be a place where students can buy and eat nutritious foods and engage in meaningful physical activity. Public schools must respond to directives from federal, state, and local authorities. The federal government can set standards for school nutrition and exercise and condition the receipt of funding on a school system's attainment of those standards.⁵⁵ States can also mandate nutrition and physical activity standards.⁵⁶

Nutrition

The National School Lunch Program and the National School Breakfast Program (collectively, the NSLP)⁵⁷provide per-meal cash reimbursements to schools that offer meals to students ostensibly meeting certain nutritional standards.⁵⁸ However, despite the availability of lunch in most schools, the percentage of students who actually eat lunch offered by the school is only about 70 percent for middle school students and 60 percent for high school students.⁵⁹ Whether or not students purchase or eat the school provided meal, many students also purchase products from vending machines, school stores, and snack bars.

Foods sold in competition with the NSLP in foodservice areas during the lunch periods, or "competitive foods," are allowed at the discretion of state and local authorities,60 unless they are on the list of "foods of minimal nutritional value" (FMNV).61 However, the only foods recognized as FMNV are the following: soda water, water ices, chewing gum, hard candy, jellies and gums, marshmallow candy, fondant, licorice, spun candy, and candy coated popcorn.⁶² This is because many products are considered exempt,63 the definition does not cover an abundance of nonnutritious foods, and the sales of FMNV are only prohibited in the food service areas during the lunch periods.⁶⁴ Thus, schools can avoid this restriction by placing vending machines beyond the food service area and allow the sale of FMNV before and after the meal period.65 The federal government must expand the scope of its FMNV provision to include the whole school campus not just the cafeteria and to cover all hours during which school activities are being held whether before or after the normal school day. State and local laws can also prohibit permissive practices and include meaningful monitoring and enforcement provisions in schools' wellness policies.

State and local authorities are authorized to impose additional restrictions on the sale of competitive food. 66 Many locations strengthened the nutrition standards for their school districts in response to the federal mandate to local educational agencies to establish wellness policies. 67 The mandate directed local agencies to develop "goals for nutrition education, physical activity, and other school-based activities that are designed to promote student wellness." 68 The federal directives were broad recommendations and districts around the country responded in a variety of ways. 69 As a result, most secondary schools still allow competitive foods and have student-accessible vend-

ing machines.⁷⁰ A recent study of the food in schools revealed that foods of lower nutritional value are more available than healthier foods in the nation's schools and students in low socio-economic areas have less access to healthier snacks.⁷¹

Districts should strengthen the nutritional guidelines for meals and snacks sold in their schools. Researchers found that "the most effective policies are those that prohibit sales of all beverages with caloric sweeteners (except for certain milk products), impose portion limits, apply throughout the school day, and apply to all grade levels, with age adjustments only for container sizes."⁷² Similarly, restrictions on food should be based on content (i.e., sugar, fat, and/or sodium) and fruits and vegetables should be made available.⁷³ Experience shows that by restricting what is allowed in schools, industry will work with the districts to provide products that meet the healthier criteria.⁷⁴

Competitive foods and beverages are supplied by companies through individual contracts with schools or districts. States and school districts have the ability to limit what the companies can supply through limitations in the contracts. For example, when Philadelphia School District changed its beverage policy to only permit 100 percent juice, water, and milk for younger students and these same beverages, plus electrolyte replacement drinks, in high schools, their supplier was contractually obligated to comply with these guidelines. To Another option, of course, is to ban competitive food and beverages entirely.

Moreover, schools have the power to restrict some or ban all marketing on their campuses. First Amendment analysis leads to the conclusion that school districts have broad constitutional authority to control marketing in their facilities, including restricting the marketing of all foods and beverages, or just those foods and beverages not allowed to be sold in the school according to school or district policies.⁷⁶

Physical Activity and Physical Education

Some local physical education and physical activity efforts were derailed by schools simultaneously trying to comply with the No Child Left Behind Act of 2001 (NCLB). NCLB was designed to improve achievement in education through standardized testing in schools across the country. As such, physical education, health education, and physical activity requirements are not being mandated by most states.⁷⁷ The National Association for Sport and Physical Education (NASPE) Shape of the Nation report found that nearly a third of the states do not mandate physical education for elementary and middle school students, and 12 states allow students to earn required physical education credits through online physical education

courses.⁷⁸ Moreover, while most states require some sort of physical education (P.E.), how often students actually engaged in physical activity varies widely. Between 17 and 22 percent of students attended P.E. each school day. Another 11 to 14 percent scheduled P.E. three or four days a week and 22 percent scheduled P.E. one day a week.⁷⁹ A way to counteract this trend is for the federal government to include support for, and require, physical education, physical activity, and health education on a regular and routine basis so all school-aged children achieve the recommended 60 minutes or more of physical activity each day. This can be achieved through revisions to the authorizing language in No Child Left Behind.

Access to Health Care Services

As one of the largest health insurance programs in the United States, Medicaid serves more than 62 million people with annual expenditures exceeding \$300 billion.80 The program is jointly funded by the federal and state governments and is administered by the states under federal guidelines issued by the Centers for Medicare and Medicaid Services to serve some of the nation's most vulnerable and disadvantaged populations.81 The federal guidelines offer guidance to states on required basic services; however, states have the flexibility to offer various benefits based on the population's need. As a result, services and benefits can vary drastically among states. In recent decades, Medicaid has garnered tremendous interest from state policymakers given its impact on state budgets and the escalating prevalence and cost of preventable disease among beneficiaries. Experts estimate that states spend upwards of \$21 billion each year to treat chronic — and often preventable — conditions such as diabetes, cancer, and cardiovascular disease.82

In recent years, the passage of the Deficit Reduction Act (DRA) has made it easier for states to pilot and implement innovative reforms that target necessary health services to subsets of beneficiaries. Given the varying health needs among Medicaid beneficiaries coupled with federal and state fiscal constraints, the DRA has enabled states to increase Medicaid's efficiency and offer necessary services to those most in need, including those who require obesity prevention and treatment services.

To that end, one strategy that has garnered increasing support and should be considered is the creation of a medical home to increase disease management strategies, build beneficiary engagement, and improve care coordination among providers. A medical home is a health care setting that provides patients with timely, well-organized care, and enhanced access to providers. Through this model, beneficiaries receive

a regular source of care and assistance in navigating the health care system, while states reduce the cost of care by preventing duplicative services and ensuring necessary follow-up medical care. The Commonwealth Fund 2006 Health Care Quality Survey found that when adults have health insurance coverage and a medical home, racial and ethnic disparities in access and quality are reduced or even eliminated.⁸⁵ Patients with medical homes are more likely to receive preventative care, whether or not they are insured.⁸⁶

In addition to the creation of medical homes, providing affordable medical services through community health centers would improve the health of community members and increase their ability to self-mange chronic conditions by providing them with access to health resources information.⁸⁷ Community health centers play an integral role in the health care safety net and provide care to the uninsured so that emergency room visits can be minimized. Providing individuals with such a resource is cost efficient and will allow care for obesity-related services when they are otherwise not available.

Reimbursement for Obesity Prevention and Care
Summit participants overwhelmingly suggested that
both public and private health insurance should cover
obesity treatment, prevention, and care. This means
that reimbursement codes for obesity-related visits are necessary. Research reveals that while certain
reimbursement codes exist, the issue is whether insurers recognize and reimburse for the codes used and
whether they do so for obesity not for another disease,
like hypertension, that providers use to treat obesity
issues. Medicaid managed care contracts generally
do not highlight obesity prevention and treatment
strategies. Thus, it is unclear whether state programs
specifically recognize, compensate, or reward providers who emphasize appropriate obesity interventions.

Some states may create further barriers to such care by restricting the number of compensated visits for certain care, strictly requiring prior authorization for treatment that is medically indicated, and prohibiting coverage for certain procedures.⁹⁰ These restrictions coupled with low payment rates have a considerable negative impact on prevention and care of obesity.

One solution would be for states to require public and private health insurance provide clear reimbursement codes for obesity and obesity-related prevention and care for both pediatric and adult patients. States should also legislate against the barriers described above to give providers the ability to address obesity and be reimbursed for such care. Another solution is to bundle obesity prevention and treatment services into one package as is done for certain "disease management" payment and coverage.⁹¹

Prevention and Treatment: Bariatric Surgery

Bariatric surgery has been recognized by the NIH as valuable for reducing the disease burden of obese patients. The Mayo Clinic found that bariatric surgery reduces cardiovascular risk and metabolic syndrome in patients. Public and private insurance covers such surgery if certain criteria are met, such as being diagnosed with a comorbidity or having previously and unsuccessfully attempted to treat obesity through medically supervised care over an extended period of time. Such criteria can function as an impediment to coverage for morbidly obese patients and such prerequisites should be eased. States can enact laws to mandate public and private health insurance cover surgery based solely on the diagnosis of morbid obesity.

Even when such criteria are met, studies show that socioeconomic characteristics are a function of who actually receives bariatric surgery. Patients on Medicaid who qualify for bariatric surgery do not receive it to the extent that those with private insurance do. While Medicaid patients have significantly higher BMIs and more severe comorbid conditions, lower income and public insurance were associated with decreased odds for selection for bariatric surgery. Thus, those who could benefit from bariatric surgery most are not obtaining such treatment.

Researchers theorize that this under-representation is caused by an inability to obtain approval for surgery from various Medicaid agencies and reduced payment to physicians and hospitals for the care of Medicaid patients.⁹⁸ Many practices will not take publicly funded patients due to low reimbursement rates. This negatively impacts preventative treatment, care, and access to services, including surgery.

Patients with publicly funded insurance have greater incidence of serious comorbid conditions at the outset, are at higher risk for complications from bariatric surgery and require more extensive post-operative care. This is likely due to decreased access to health care and preventative services over the life course. Increased preventative care is clearly warranted. Investing in prevention will produce direct medical cost savings and avoid the toll obesity and related disease processes take on human life. States should regulate Medicaid programs to focus on preventative measures.

Disparities

There is lack of a cohesive national strategy to eliminate racial and ethnic health disparities. Disparities in health care are defined as racial or ethnic differences in the quality of health care that are not due to access-

related factors, clinical needs, preferences, or appropriateness of interventions.⁹⁹ Even among patients insured at the same levels, research shows that racial and ethnic minority patients face barriers to services and receive less care than their Caucasian counterparts. This cuts across many health issues, and obesity is high among them.

The lack of access to health care is one overarching issue for many racial and ethnic minorities, who are more likely to lack health insurance coverage or be underinsured compared to Caucasians.¹⁰⁰ People of color make up about 30 percent of the U.S. population, but they comprise over half of the nation's uninsured.101 For American Indian populations living in cities, securing access to Medicaid coverage has proven especially difficult.¹⁰² Minority individuals are more likely to access health care in public hospitals and community health centers. 103 However, minority communities have fewer health care resources such as hospitals, clinics, and nursing homes.¹⁰⁴ These disparities result in an increased incidence and prevalence of obesity-related complications, including increased rates of co-morbidities due to lack of access to care, reduced services, and an absence of information.

States can improve access and coverage for racial and ethnic minorities by enacting laws specifically aimed at improving Medicaid coverage and reimbursement rates, as discussed in the preceding sections. Improving funding reimbursement rates by Medicaid for obesity-related visits could also improve access to providers for whom reimbursement is currently low. This would also allow providers to spend more time providing necessary care and engaging patients in informative discussions. Further, the government could provide physicians with financial incentives that encourage adherence to age and gender appropriate disease screenings and are linked to positive disease control outcomes, regardless of race or ethnicity.¹⁰⁵ Finally, the federal, state, and local governments should provide funding to hospitals in financially vulnerable areas because low Medicaid reimbursement rates and uninsured care threaten their stability.106

The American Indian communities in the U.S. are in a particularly precarious position with respect to obesity and diabetes rates, which are among the highest in the world. This area is a recognized gap in obesity prevention and control efforts and must be a priority research area going forward. Federal, state, and local programs directed at obesity prevention and control must pay particular attention to ensure that American Indians benefit from these improvements. Due to economic difficulties and geographic isolation of some reservations, policymakers should partner with tribal governments, American Indian organiza-

tions, and community members to ensure the reach of improvement efforts extend to American Indian communities. One area where governments can immediately act is to strengthen the nutritional quality of the USDA food distribution program directed at American Indian communities. This program provides a safety net for many American Indians. However, the nutritional quality of many of the commodity items is poor and must be improved. ¹⁰⁸ In addition, because most American Indian school children on reservations eat two meals a day in school, ¹⁰⁹ the nutrition guidelines in such schools must be strong and the quality of commodity foods in these schools must be improved.

Discrimination Based on Weight

Beyond obesity and nutrition policy, addressing and reducing discrimination based on weight is necessary for equality in a healthy society. Bias and discrimination result in discriminatory practices against the perceived "lesser" class. This perpetuates the problem through reduced utilization of health care, reduced coverage by health insurance, and public policies that do not match the severity of the problem.

Because it is not illegal to discriminate against people based on their weight, obese people suffer from discriminatory practices by employers, medical professionals, and health insurance companies, with little to no legal recourse. ¹¹⁰ One way states can protect their citizens against weight discrimination is to follow the lead of Michigan and revise their anti-discrimination laws to include weight as a protected class. ¹¹¹

Discrimination in employment is of particular concern due to the fact that it is a source of income, stability, and for most, health insurance. Studies confirm that obese persons are less likely to be hired, are more harshly disciplined, paid less, and have been terminated for failure to lose weight.¹¹² Because Congress has legislated in the field of employment discrimination several times prior, this is a viable avenue to address weight discrimination. Congress should enact a Weight Discrimination in Employment Act¹¹³ that replicates the Age Discrimination in Employment Act of 1967.¹¹⁴

People who have been discriminated against have attempted to sue under two existing provisions, the American with Disabilities Act (ADA) of 1990¹¹⁵ and the Rehabilitation Act (RA) of 1973,¹¹⁶ with little success. The initial and very significant drawback of suing under these provisions is that a potential plaintiff must claim that he or she is disabled. The ADA defines disability as (a) a physical or mental impairment that substantially limits one or more of the major life activities of such individual; (b) a record of such an

impairment; or (c) being regarded as having such an impairment.¹¹⁷

Most courts have found that to constitute an impairment under the first two prongs of the ADA, a person's obesity, even morbid obesity, must be the result of a physiological condition (like diabetes). Congress should amend the ADA definition of disability to explicitly include obesity, and the Equal Employment Opportunity Commission should redefine "impairment" to include obesity not based on a physiological condition. This would still require people to allege that they are actually disabled, but morbidly obese individuals who are disabled due to their weight would be covered under the ADA comparable to any other disability.

The third prong of the ADA may prove to be more effective in combating discriminatory practices against overweight individuals. Congress recently passed the ADA Amendments Act of 2008,119 which seeks to reinstate a "broad view" of the third prong's "regarded as" language, 120 as a direct reaction to increasingly limiting case law interpreting this definition.¹²¹ Through this amendment, Congress sought to reinstate the rationale of a Supreme Court case annunciating a broad interpretation of the third prong. This case explained third prong coverage as follows: "a person with some kind of visible physical impairment which in fact does not substantially limit that person's functioning.' Such an impairment might not diminish a person's physical or mental capabilities, but could nevertheless substantially limit that person's ability to work as a result of the negative reactions of others to the impairment."122 This sounds directly applicable to those who suffer from weight discrimination. The Act went into effect on January 1, 2009, but legal action under this revised understanding of the third prong's intent has yet to be tested in court. However, this would be a less stigmatizing and potentially fruitful way that overweight and obese people who are not impaired, but have been treated as if they were, could proceed to secure equal rights.123

Conclusion

Public health legal preparedness for obesity prevention and control is essential at the federal, tribal, state, local, and community levels. Law and policymakers and public health practitioners have many domains to address and consider when developing, implementing, and evaluating obesity prevention and control strategies and interventions. In the healthy lifestyles domain, the goal is to make the default environment one that fosters healthy lifestyles by making the healthy option the easier choice. Action items include altering the farm subsidies to increase the affordability of

produce and lean meats. Marketing practices targeting children must be regulated at the federal level, and the FTC should be authorized to regulate the youth marketing and advertising practices of the food and beverage industries.

The healthy places domain recognizes that the surrounding community, workplace, and transportation options influence the ability to make healthy choices. Communities can use their power to zone to protect public health and organize the built environment to foster healthy choices through increased access to supermarkets and farmers' markets, and fewer fastfood outlets and corner stores predominantly carrying processed food items. The federal, state, and local governments should support public transportation to increase residents' access to the community, foster physical activity, and address environmental health concerns. Finally employers must be incentivized to support healthy lifestyles in the workplace to prevent obesity and obesity-related diseases. This would result in reduced direct expenditures for health care, workers' compensation, and disability payments, while simultaneously reducing absenteeism and increasing worker productivity.

The final domain of healthy society addresses the complex societal causes and contributors to obesity, disparities and discrimination. Under this domain, federal, tribal, state, and local policies for school nutrition standards and increased physical activity must be strengthened. Further federal and state authorities can work to increase access to health care, including preventative services, through increased reimbursement for obesity-related care for Medicaid beneficiaries. Specific racial, ethnic, and socioeconomic disparities that result from both the lack of access to services and contribute to obesity are challenges on their own. This area requires more research and must be directly addressed. Similarly, weight discrimination must be addressed to ensure social justice and adequate care for those currently suffering from obesity.

Governments are faced with many critical issues with respect to public health, health care access, and obesity prevention and control. There are legal action options available at every level of government. At the federal and state level, policymakers should enact antipreemption provisions setting a floor not a ceiling on the initiatives states and localities can adopt. Local efforts have been impressive but strong state, tribal, and federal efforts are required to adequately address the obesity crisis in the United States. It is imperative that governments act now to make real change. Deregulations, 124 attributions of personal responsibility, 125 and nutrition educational campaigns 126 have proven ineffective to prevent and control obesity. It is

time to address obesity as a disease, like any other, and enact legal action items that will directly reduce the disease burden and prevent future crisis. The future of our country's health depends on the implementation of legal action items now.

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Improving Legal Competencies for Obesity Prevention and Control

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This paper is one of four interrelated papers resulting from the National Summit on Legal Preparedness for Obesity Prevention and Control (Summit) convened in June 2008 by the Centers for Disease Control and Prevention (CDC), the Robert Wood Johnson Foundation, and the American Society of Law, Medicine, & Ethics. Each of the papers deals with one of the four core elements of legal preparedness: (1) laws and legal authorities for public health practitioners; (2) legal competencies public health practitioners and legal and policy decision makers need for use of these laws and authorities; (3) crossdisciplinary and cross-jurisdiction coordination of law-based public health actions; and (4) information on public health law best practices. Collectively, they are referenced as the "white papers."

Our purpose is to offer action options that will help to improve the legal competencies of public health practitioners and policy decision makers with respect to drafting, interpreting, implementing, and enforcing laws and regulations that are relevant to the effective prevention and control of obesity. The accompa-

nying assessment paper provided a foundation for this agenda by first establishing that legal competence for obesity prevention and control is important for both health professionals, who with proper training can effectively interject health considerations into decision-making processes, and non-health professionals involved with relevant policy and legal work, who with proper training can effectively incorporate health considerations into their decisions. The paper acknowledges apparent gaps in not only health professionals' understanding of legal tools relevant to obesity but also policymakers' recognition of how obesity relates to their decisions. In addition, this paper set forth specific competencies each of these two broad groups should have to strengthen their legal preparedness for obesity prevention and control.

To improve these competencies within and among the relevant professionals in these two broad groups, our framework identifies critical knowledge, skills, values, analytical approaches, and communication strategies. We also suggest mechanisms by which public health professionals can interact with professionals

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Options to Improve the Identified Competencies

Table 1 sets forth tangible options to improve the legal competencies identified in the assessment paper for both obesity and public health professionals, as well as similar but distinct options for legal and policy decision makers. The options are by no means exhaustive. We focused on the critical knowledge, skills, values, analytical approaches, and communication strategies within and among the relevant professionals in both groups. These options should be feasible for trainers and educators in the relevant disciplines to implement.

The implementation of these options or other approaches should be evaluated. As a result of an evaluation process, the options to improve legal competencies within and among the relevant professionals in these two broad groups might be modified to highlight the most effective methods. Most likely, further discipline specificity, such as legal competencies for school boards or regional planners, will be necessary. Further collaboration between health professionals and decision makers may lead to more similar or, ideally, joint competency building options.

Approaches to Strengthen the Training of Current and Future Professionals to Apply Laws and Authorities

Training Today's Public Health Professionals

Today's obesity epidemic demands that public health practitioners quickly become better prepared at understanding and using law in ways that are effective

in supporting and promoting obesity prevention and control. They must also galvanize relevant non-health professionals to collaborate.

Historically, the focus of a local health department general counsel was to assist in applying legal authority to infectious disease control and environmental health activities, as well as protecting the department from legal liabilities. Likewise, in regards to public health laws such as tobacco control or emergency preparedness, the primary duty of legislative members and their counsel has been traditionally to draft and review potential statutory changes to avoid federal and state constitutional challenges. Schools of Public Health gradually have added faculty members with law degrees. Interestingly, these attorneys predominantly research and teach issues such as basic public health laws and authorities, health care, infectious disease control, and environmental policy. They are not primarily charged with researching or teaching the legal tools necessary to prevent chronic diseases. In response to the obesity epidemic and the predominance of chronic versus infectious disease, local health departments, legislative members, and public health schools have increasingly recognized the possible function of public health and environmental law to support the prevention of chronic diseases.

Today's public health practitioners from non-legal backgrounds have a wide range of legal competency. One public health department deputy may have decades of experience using law to improve infectious or chronic diseases. Another may have occasionally used law or relied heavily on the department's legal counsel. Additionally, one may have routinely been responsible for drafting or amending a local Health Code or regularly advocating for legislation. In contrast, another practitioner may have focused on community programming without much legal involvement. Some practitioners will be able to count on legal counsel with significant public health expertise, while

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Table I

Options for Improving Legal Competencies of Public Health and Legal Professionals for Legal Preparedness for Obesity Prevention and Control

OBESITY AND P	UBLIC HEALTH PROFESSIONALS	LEGAL AND	POLICY DECISION MAKERS
Legal Competencies	Options for Improving Legal Competencies	Legal Competencies	Options for Improving Legal Competencies
Identify and understand relevant laws, policies, and government practices	I. Collaborate with lawyers and other decision makers to research the laws and policies that have implications for obesity prevention and control. Special attention should be given to laws and policies that may disproportionately impact those who are overweight or exacerbate health disparities. Public health professionals should seek to create avenues of communications with the food industry and other sectors, including the production, manufacturing, marketing, and distribution of food products from "farmtofork" in order to learn about the effects of laws and policies on daytoday operations of companies in the relevant regulated industries in relation to determinants of obesity. Opportunities in other relevant disciplines such as education, transportation, insurance, and housing should be sought out too. 2. Develop and disseminate "case studies" and other educational materials to enable health professionals to explore the role that current laws and public policies play in influencing the environment and related implications for obesity prevention and control. 3. Develop legal and public policy "primers" and similar guidance documents addressing the basic substantive and procedural requirements of laws and regulations that are relevant to promote obesity prevention and control. 4. Expand and strengthen legal and public policy training components of public health graduate school curricula and continuing education and professional developmentopportunities, including with respect to components addressing school, worksite, hospital, and community authority in enacting public health and safety laws, agriculture law, food and drug law, food advertising law, transportation and regional planning, and other relevant business, trade, and government regulation topics.	Recognize the physical, environmental, and social conditions relevant to the development of evidence-based obesity prevention and control programs	I. Include obesity presentations and discussions at conferences and professional gatherings of legal and policy makers, e.g., planners, school officials, and transportation engineers. 2. Disseminate information about the link between policy and obesity in a variety of professional and lay formats. 3. Collaborate with professional associations and schools outside healthrelated fields to review and enhance training in basic public health concepts. 4. Create internship placement opportunities in public health offices and research projects for students in professional education programs training in relevant sectors, e.g., planning, architecture, engineering, education, public administration, and law. 5. Create evidencebased public health and obesity assessment tools, such as "report cards," that enable policy makers to evaluate and mark the progress their communities aremaking toward the achievement of obesity prevention and control.

OBESITY AND PUBLIC HEALTH PROFESSIONALS		LEGAL AND POLICY DECISION MAKERS		
Legal Competencies	Options for Improving Legal Competencies	Legal Competencies	Options for Improving Legal Competencies	
Explain obesity-related consequences of policy options to decision makers and stakeholders	I. Provide educational and training opportunities with respect to public speaking and public relations to support legal and public policy related communication skills. 2. Create "tool kits" of power point slides and other materials that can be tailored and culturally adopted to a variety of public policy related issues and settings. 3. Develop internship placement opportunities for public health students within legal and policymaking agencies such as planning agencies, recreation departments, school boards, and transportation departments. Industry internships should also enable students to get handson experience of the relevant regulated industries. In many cases, student internships are readily available with policy makers' office such as state legislators, county boards or commissioners, and city councils or assemblies.	Identify and evaluate laws, policies, and government practices that are potentially relevant in the development and implementation of obesity prevention and control initiatives	I. Create case studies and other educational materials that help illustrate how laws and policies affect the environment and have implications for obesity prevention and control.	
Identify, encourage, and engage all relevant stakeholders in the development and implementation of research programs and evidence-based intervention strategies to promote obesity prevention and control	I. Create opportunities for representatives of different stakeholder groups to participate in public health conferences pertaining to the development of research, and of intervention strategies on obesity prevention and control. 2. Create opportunities for jointsponsorship of research and evidence-based public health invention initiatives that fully engage relevant government, public health, and industry stakeholders. 3. Develop jointly sponsored initiatives, partnerships, and coalitions that fully engage relevant government, public health, and industry stakeholders through the development and dissemination of educational materials, guidance, and best practices for identifying the range of relevant stakeholders and developing constructive working relationships among stakeholders with diverse expertise, experience, and perspectives (e.g., environmental groups, bicycle advocates, architects, parentteacher organizations, food manufacturers and retailers).	Consider interests of and consult stakeholders	I. Create "tool kit" of contacts, sources, and techniques for outreach to relevant stakeholders. 2. Create training materials that highlight potential "winwin situations" and facilitate collaboration between public health officials and relevant stakeholders.	

OBESITY AND PUBLIC HEALTH PROFESSIONALS		LEGAL AND POLICY DECISION MAKERS	
Legal Competencies	Options for Improving Legal Competencies	Legal Competencies	Options for Improving Legal Competencies
Engage legal or policy decision makers where appropriate	I. Create opportunities prior to pending legislation or ordinance formation for policy makers and obesity experts to meet and discuss policies that can influence nutrition, physical activity, and ultimately obesity. Provide guidance on potential conflicts of interests for public health officials associated with legislative advocacy (i.e., how and to what extent can a public health department employee advocate for a specific piece of legislation). 2. Develop tools, such as a catalog of legal decisions, that help local authorities assess the extent of existing authority the government has in its public health or other laws and regulations to implement programs or regulations or enforce relevant provisions to address obesity. 3. Create mechanisms for regular input from health officials on important decisions or mandatory health impact assessments that require new development plans to be submitted to the relevant health office.	Develop evidence-based public health training and outreach programs for policy decision makers to promote obesity prevention and control more effectively under existing laws and help prevent discrimination against persons based on body weight or composition	Create training modules and materials targeted at different sectors and decision makers that highlight scope of existing authority and how it can be used to promote health. Create training modules and materials that address the scope and nature of the authority that are granted to federal, tribal, state, and local governmental agencies under relevant statutes and constitutional and administrative law doctrines.
Identify and evaluate potential gaps and limitations of existing laws which may impede progress in the promotion of obesity prevention and control	I. Identify key legislation that requires regular reauthorization and develop recommended provisions and supporting analytical material well in advance. 2. Create interdisciplinary and multisector working groups, coalitions, and partnerships to draft model legislation and share resources.	Address gaps in current laws or legal processes	I. Facilitate multisector planning groups to identify legislation subject to regular reauthorization and begin early planning on providing lawmakers with adequate background and model language. 2. Create research and monitoring projects that study and report to decision makers the effects of key decisions that have an impact on nutrition and physical activity.

most will continue to rely on local government counsel without specific public health knowledge.

In addition, current practitioners have a range of authority to prevent and control obesity. Some local jurisdictions, such as New York City, have fairly broad autonomy and authority to formulate public health law through their Boards of Health; others are largely limited to enforcing state law. But, at any level of government, avenues for legal action exist which are relevant and applicable to obesity prevention and control. These can encompass a range of approaches: regulation by executive agencies, Health Codes controlled by Boards of Health, local zoning and planning rules, and state or local laws.

Training strategies and materials for current practitioners will likely be a challenge to develop, implement, and evaluate. The methods, such as continuing education and technical assistance offered by universities and national, tribal, state, and local health departments, must be flexible to the practitioners' readiness to use law as a tool to prevent and control obesity. Professional associations should emerge as leaders by training their membership in relevant legal approaches. Furthermore, public health professional associations should take the lead in partnering on these training endeavors with other relevant professional associations, governmental entities, academic centers, and industry partners.

A "train the trainer" approach might have great utility in improving current practitioners' legal competencies. That is, individuals who are "competent" in using a particular legal tool(s) to prevent and control obesity would train other practitioners. The trainees can provide feedback on their experiences in implementing the legal tool in their respective jurisdiction and together, the trainer and trainees, can go on to train other practitioners.

Educating Students

Training to achieve legal competencies for obesity prevention and control needs to be integrated into academic centers that are responsible for preparing the next generation of professionals. The need for the Summit illustrates that in spite of the longstanding use of law and legal authorities in other areas of public health only recently and in response to the obesity epidemic has law — from class actions to school-based policies - been considered a tool to prevent and control obesity. While not well studied, anecdotal evidence suggests that students in health and other fields may be introduced to these developments tangentially in their class discussions, course projects, or in non-academic activities, such as watching television or surfing the internet. Our aim is to provide a framework to ensure a broader familiarity.

Curricula within relevant disciplines vary greatly in the extent to which they build legal competency. In public health, students generally are introduced to how law and policy have been used successfully for critical health issues, e.g., quarantine, emergency response to man-made or natural disasters, patient rights, food safety, tobacco control, vaccine-preventable diseases, automobile safety, or human immunodeficiency virus/ acquired immune deficiency syndrome (HIV/AIDS). Students may have the option to take public health law or policy-based courses, but they are generally not required. Nutrition students generally learn how the Child Nutrition Act of 1966 was enacted to safeguard the health and well-being of American children. Medical students may learn about the 2004 announcement from the U.S. Department of Health and Human Services that the Agency would remove from the Centers for Medicare and Medicaid Services coverage manual language that obesity is not an illness.

Public health law is not offered at all law schools. When available, the course is generally a sparsely attended elective that may or may not cover obesity and other chronic diseases. School administration type programs are likely to only offer one class on education law, which is unlikely to cover anything related to school authority to address obesity. Urban planning, architecture, and architectural engineering students

are now just starting to see courses that address how their decisions may impact chronic diseases.

Students may be allowed to take electives in other disciplines. However, law schools typically do not allow non-law students to register for law classes. Even if a student, such as a public health student, takes an urban planning course or an education student takes a basic nutrition course, these survey courses may not provide a framework by which cross-disciplinary connections can be made. In other words, a public health student may learn the fundamentals of planning in a survey course but not understand the planning variables that directly relate to health. Likewise, this public health student or a planner taking a basic nutrition course will probably not walk away from the course with the necessary tools to properly impact their own discipline. The lack of routine, cross-disciplinary exchange in academic centers means future leaders are not systematically being prepared to develop, implement, or evaluate policies which consider the health implications or apply legal principles to public health invention.

To accomplish the action options identified in the papers, universities may need to enable more cross-disciplinary and innovative teaching and learning approaches in a manner that is integrated with a student's graduation requirements. These may include the development of curriculum components, training materials, and conferences on the interaction of health and law. Trainers may be faculty from the university or guest lecturers that come to the university to conduct a seminar, workshop, or lecture.

Selected Disciplines Training $\ensuremath{\mathfrak{G}}$ Education Suggestions

Table 2 provides example approaches to improve the legal competencies for obesity prevention and control in selected disciplines. Understanding the potential regulated industry or at least an awareness of how laws influence a business' practices, policies, and products is an important, often neglected, component of becoming competent in using law as a tool to prevent and control obesity. We suggest current practitioners and students partner with industry in order to better understand how to work with industry to promote health rather than work without them, or, as is more often the case against them. Our desire is for modification of approaches after evaluations are conducted and further cross-disciplinary training methods, modules, and mediums emerge.

Tools to Increase Legal Competency

The "Improving Information on Public Health Law Best Practices" paper identifies methods to improve the information and best practices for obesity prevention and control.² The paper explores the following: who needs this information; types of information needed; what content should be included; and who should develop, fund, disseminate, and evaluate the delivery of this information.

Table 3 expands and highlights key criteria to assess whether a sample policy, best practice, or case study will be an effective learning instrument to improve legal competencies for obesity prevention and control. We note useful features to assess before using a particular model policy, best practice, or case study to teach or learn from. We also emphasize the use of evidence-based legal strategies, where possible. The strategies do not necessarily need to be obesity specific because legal approaches to other public health problems can serve as useful learning instruments.

Studying both successful and unsuccessful policy development cases can provide useful learning opportunities. While diverse views concerning the evidence evaluating the public health implications of mandatory nutrition labeling requirements exist, studying policy development procedures and outcomes in nutrition labeling case studies can be useful in promoting legal competencies among public health professionals and decision makers. In this regard, a case study concerning the legislative process and litigation record concerning the mandatory calorie-labeling ordinance enacted in 2006 in New York City may be instructive with respect to federal preemption and other crosscutting legal considerations.3 For example, a study of the record in the New York City case would show that the ordinance requiring certain restaurants to make the calorie content of menu items publicly available was successfully challenged on federal preemption grounds in an action brought by city restaurateurs. The court's decision striking down the 2006 ordinance included legal analyses concerning the scope and limits of the City's authority to require nutrition labeling of restaurant foods, which provided a framework for the City's subsequent initiative to adopt an ordinance that would satisfy the governing legal standards.⁴

We also suggest important components to include in developing future model policies, best practices, and case studies, particularly for teaching and learning purposes. These suggestions stress how to use models or cases to develop knowledge, skills, values, analytical approaches, and communication strategies. Ideally, the person, team, or entity that wrote the actual policy or implemented the best practice would compile these learning pieces.

Alternatively, the model policy, best practice, or case study used in learning situations may be developed by a combination of a representative sample of public health, law, and other professionals who will ultimately use the policy, practice, or case to teach professionals and students. Having relevant disciplines assess these learning tools prior to use as an educational resource may help limit the amount of technical assistance professionals in that discipline need later in understanding or using the resource.

Developing a dissemination plan to ensure that relevant disciplines have access to these tools is essential. Federal, tribal, state, and local governmental entities could partner with professional associations, as well as foundations to create an online collection of model policies, best practices, and case studies for educational purposes. Since the internet allows for rapid, wide, and easily accessible access to a collection of model policies, best practices, and case studies, each individual piece should be user-friendly for maximum reach. That is, for online education, the user may have no connection or context of where the best practice took place, so the model or case must help the user distinguish possible gaps, obstacles, or enablers of the policy in different jurisdictions.

The development of industry case studies highlighting successes and failures of obesity prevention and control policies, practices, and products can enhance public health, health care, and other professionals' understanding of the challenges to business and their practices.

Taken together, sample policies and programs, best practices, and case studies should be developed and used as a key tool to improving professional and student legal competencies in all relevant disciplines. Cross-disciplinary tools will also serve to bridge communication challenges and learning environments, along with facilitating more effective bridges between public health, law, and other key disciplines.

Suggestions for the Evaluation of the Effectiveness of Legal Competency to Address Obesity

The ultimate test of legal competency to address obesity prevention and control is three-fold: (1) were obesity and public health professionals able to interject health considerations into decision-making processes? (2) were legal and policy decision makers able to incorporate health considerations into their decisions? and (3) was this action effective in addressing obesity prevention and control?

These evaluations may focus on either the process of legal action or on its outcomes in terms of behavior change or health benefit. For instance, how did public health professionals assist in identifying and addressing gaps in current laws to prevent and control obesity? What evidence is available or needed to establish the nature and extent of the actual public health effects of such laws with respect to the adoption and/or main-

Table 2

Examples of Practitioner Training Approaches and Academic Curriculum to Improve Legal Competencies for Obesity Prevention and Control by Selected Sectors

SECTOR	PRACTITIONER TRAINING APPROACHES	ACADEMIC CURRICULUM
Health Professionals Public Health Dietitians Nurses Medical Doctors Pharmacy	Professional Associations: American Public Health Association, American Dietetic Association, American Nurses Association, American Medical Association, and American Pharmacists Association should consider strengthening or offering programs on policy and legal aspects of obesity: At their annual conferences; At workshops during the year on general or more advanced legal preparedness for obesity prevention and control; Through professional development resources; Through continuing education opportunities; In their respective Journals; Through the creation of obesity legal and policy action groups; Through the creation of a list_serv within each Association; and Through the provision of training resources, model policies, best practices, and evaluations of legal strategies that aim to prevent and control obesity. Local & State Government Health Agencies & the Center for Disease Control and Prevention (CDC) should consider: Providing resources, workshops, online training, and "how to" suggestions for professionals to improve obesity prevention and control legal and policy competencies; Incorporating legal preparedness for obesity prevention and control in all relevant positions' orientation and training programs; and Developing resources that are broad for all health professionals, but also tailored to specific health professions such as public health, dietetics, nursing, medicine, and pharmacy.	Target: Public Health: Masters or Doctoral Public Health programs Dietetics: Undergraduate Dietetics programs and Registered Dietitian Internships Nursing: Undergraduate Bachelor of Nursing Programs Medicine: Medical Schools Pharmacy: Undergraduate and Graduate Pharmacy Programs Courses: Public Health: Public Health Law and policy relevant skillsbased practicum Dietetics: Integrate into American Dietetic Association Accreditation Curriculum emphasis on relevant policy and legal components of nutrition. Nursing: Integrate legal and policy components of treatment plans and reimbursement aspects of obesity. Medicine: Integrate legal and policy components of treatment plans and reimbursement aspects of obesity. Pharmacy: Integrate legal and policy components of treatment plans and reimbursement aspects of obesity, along with the environmental and legal aspects of the prevention and treatment of obesity. Seminars: Public Health: Invite local attorneys or law professors to present on obesity and legal connections, such as Medicare reimbursement and obesity related doctor visits. Dietetics: Invite local attorneys or law professors to present on legal aspects of nutrition issues, such as the First Amendment and food marketing to children. Nursing: Include handson workshops on the legal aspects of obesity, particularly privacy issues of Body Mass Index (BMI) measures in schools and insurance coverage of obesity related conditions. Medicine: Invite local attorneys or legal professionals to discuss during medical rounds or seminars the role of legal preparedness for obesity prevention and control.

SECTOR	PRACTITIONER TRAINING APPROACHES	ACADEMIC CURRICULUM
Health Professionals continued		Internships: Public Health: Arrange opportunities in legal or policy venues. Students should also seek out opportunities to get "hands on" experience in relevant, regulated industries (e.g., food, beverage, farming, and transportation) to better understand the industry's operations, standards, and practices.
		Dietetics: Design rotations in Registered Dietitian Internships to work with local policy makers on antiobesity policies. Students should also seek out opportunities to get "handson" experience in relevant, regulated industry (e.g., food, beverage, farming, and transportation) to better understand the industry's operations, standards, and practices.
		Nursing: Create policy internships with government agencies or clerkships with health law firms for nursing students to work in while in school or during the summers.
		Medicine: Design first year summer opportunities with obesity policy or legal aspects, in addition design fourth year rotations to work on obesity legal and policy reports and projects.
		Pharmacy: Design summer and part-time clinical rotations to work with attorneys and policy makers working on legal advocacy for the pharmacological, as well as nonpharmacological prevention and treatment strategies for obesity.
Educators (includes teachers,	Professional Associations: National Education Association, American Federation of Teachers, National School Boards	Target: Undergraduate education programs and graduate education administration
school administra- tors, day care administrators,	Association, American Association of School Administra- tors, National Association of Secondary School Principals, National Association of Elementary School Principals,	Courses: School nutrition, physical education and activity, and education law
and school board members)	School Nutrition Association, National Head Start Association, and relevant state and local education and childcare associations should consider strengthening or offering programs on policy and legal aspects of obesity:	Seminars: Invite nutrition, physical activity, and policy experts to discuss a variety of measures school districts can take to reduce childhood obesity—and the districts authority to do so.
	 At their annual conferences; At workshops during the year covering general or more advanced legal and policy topics; Through professional development resources; Through continuing education opportunities; In their respective member publications and online resources; Through the creation of obesity legal and policy action group; Through the creation of an email group or list_serv within each Association; and 	Internships: Provide opportunities for education students to work on issues like school meals or physical activity in school with government agencies or advocacy groups. Students should also seek out opportunities to work in relevant, regulated industries (e.g., school meal providers and food or beverage companies that vend in schools).
	 Through the provision of training resources, model policies, best practices, and evaluations of legal strategies that aim to prevent and control obesity. 	

SECTOR	PRACTITIONER TRAINING APPROACHES	ACADEMIC CURRICULUM
Educators, continued	 Local, State, and National Government Education Agencies should consider: Providing resources, education programs and workshops, and "how to" suggestions for professionals to improve obesity legal and policy competencies; Requiring school board members to be trained in education law, particularly school authority relating to antiobesity initiatives; and Evaluating childcare regulations to assure appropriate physical activity and nutrition. 	
Lawyers	Professional Associations: American Bar Association, National Association of Attorney Generals, American Health Lawyers Association, and the Council of School Attorneys should consider: Offering sessions to train membership on policy and legal aspects of obesity; and Creating an obesity legal and policy action group. State Bar Associations should consider: Offering continuing education credit to obesity related workshops like the Summit; and Adding legal competencies for obesity prevention and control sessions and resources in its annual conferences, workshops, and online resources.	Target: Law students in health law programs or considering public interest, education, planning, or government policy. Courses: Public Health Law, with increased options to take the course during summer school or alternative winter programs. Seminars: Work with the American Bar Association and health relevant bar associations to host at least one obesity-focused seminar a year at a law school. Allow for a web cast option. Internships: Utilize one or two credit externships to team law students with federal, tribal, state, or local government health agencies or with public health researchers. Law students should also seek out opportunities to learn "hands on" about the relevant, regulated industries, including the legal underpinnings of the industry such as: business/ trade regulation, the Federal Food, Drug, and Cosmetic Act (FDCA), the Federal Trade Commission Act (FTC), and related federal and state laws and constitutional doctrines (e.g., First Amendment, specifically commercial speech).
Planners, Architects, Architects, Architectural Engineers, Civil Engineers, and Construction Managers	Professional Associations: American Planners Association, American Institute of Architects, Architectural Engineering Management Association, the Associated General Contractors of America, Associated Builders and Contractors, Inc., American Society of Civil Engineers, American Society of Mechanical Engineers, Illuminating Engineering Society, Institute of Electrical and Electronics Engineers, Inc., and the U.S. Green Building Council should consider: Offering sessions and continuing education opportunities to train membership on policy and legal aspects of obesity; Creating an obesity legal and policy action group; For AIA, specifically] Extending its successful FitCity collaboration with the New York City Health Department to other cities to encourage the incorporation of physical activity promoting design into construction; and	Target: Undergraduate and graduate planning, geography, architect, and architectural engineering students. Courses: Offer mandatory one to two credit course on the health aspects related to planning, designing, and building. Design teamtaught elective courses with public health faculty. Seminars: Aim to offer at least one seminar a year related to the built environment and obesity outcomes. Internships: Provide opportunities for students to work with local public health faculty on built environment research endeavors.

SECTOR	PRACTITIONER TRAINING APPROACHES	ACADEMIC CURRICULUM
Planners, Architectural Engineers, Civil Engineers, and Construction Managers, continued	[For the U.S. Green Building Council, specifically] Training health professionals on the Leadership in Energy and Environmental Design (LEED) Green Building Rating System as a way to establish benchmarks for the design, construction, and operation of healthy buildings and spaces.	
Health Insurance	 Professional Associations, Insurance Companies, & Employers: National Association of Insurance Commissioners, Blue Cross Blue Shield Association, America's Health Insurance Plans, along with other health insurance companies and groups should consider: Providing opportunities to improve legal competencies for obesity prevention and control in health insurance professionals; and Developing workshops and educational resources that train insurance professionals, as well as non-insurance professionals about the role of reimbursement in preventing and controlling obesity. State Insurance Regulators should consider: Providing trainings and educational resources to improve legal competencies in obesity prevention and control; and Creating venues to link the insurance industry with public health professionals, policymakers, and other stakeholders to explore reimbursement structures that promote health. 	Target: Undergraduate and graduate students in business and health policy and administration Courses: Incorporate preventive medicine into insurance students curriculum; offer near and longterm costeffectiveness methodology coursework; and integrate more cross-collaboration opportunities for students to learn how to conduct their healthcare assessments and other economic and social benefits. Seminars: Invite health professionals to discuss the costeffectiveness and suggested reforms for current reimbursement structure. Create opportunities for policymakers to come and discuss the role of law in financing health care, particularly in governmentfunded programs such as Medicare and Medicaid, and the obstacles they face in creating a more preventive approach to health care. Internships: Create opportunities for students to observe firsthand the current insurance framework's strengths and weaknesses and design internships that allow students to examine the legal and legislative underpinnings of the insurance industry.
Public Policy, Public Administration, and Political Science	Professional Associations: National Governors Association, National Conference of State Legislatures, National Caucus of Black State Legislators, National Caucus of Hispanic State Legislators, National AsianPacific Caucus of State Legislators, Council of State Governments, National Foundation of Women Legislators, American Legislative Exchange, U.S. Conference of Mayors, State associations of elected officials, International City/County Management Association, and National Association of State Departments of Agriculture should consider providing financial support for educational opportunities to learn about the science and evidence underlying health policy decisions and the role health should play in developing policy and programs. Employers: Should encourage employees to understand the impact their policies and regulations have on obesity prevention and control.	Target: Undergraduate and graduate political science, public policy, and public administration students. Courses: Provide mandatory survey course on health-related policies and design team taught advanced courses on health policy, with an emphasis on preventive measures for obesity. Seminars: Host workshops with local public health professionals working on improving a particular local, state, tribal, or federal policy. Internships: Provide research opportunities with local public health faculty working on policy relevant studies or initiatives. Create opportunities for public policy students to work with public health professionals in the government, private, and nonfor-profit sector.

SECTOR	PRACTITIONER TRAINING APPROACHES	ACADEMIC CURRICULUM
Business	Professional Associations and Labor-Oriented Organizations: American Marketing Association, U.S. Chamber of Commerce, National Federation of Independent Business, National, state, and metropolitan associations and chapters that serve minority and women-owned businesses, National Business Group of Health, and American Farm Bureau (and state chapters), American Federation of Labor and Congress of Industrial Organizations, American Federation of State, County, and Municipal Employees, and Service Employees International Union should consider offering sessions and continuing education opportunities to train membership on policy and legal aspects of obesity. Employers: Should consider encouraging legal counsel, along with other employees to understand the role their business policies and products play in obesity prevention and control.	Target: Undergraduate and graduate students Courses: Integrate into undergraduate and graduate programs health aspects of business, including the ethics of marketing "junk food," designing health-care infrastructures that facilitate an equitable and healthy workforce, and considering ways to create a "healthy" work environment. Seminars: Feature businesses that are marketing healthy products or working on innovative approaches to create a healthy workforce. Internships: Support students to work on marketing lessfunded or profitable products, like fruits and vegetables, along with healthy lifestyles and physical activity.

The selected sectors aim to include professionals within the four specific settings: (1) school (e.g. schoolteachers and administrators), (2) worksite (e.g. business), (3) community (e.g., planners), and (4) medical/clinical (e.g. doctors, nurses, and insurance). All of the selected sectors impact multiple settings; most selected sectors can influence at some level all settings. Training and education efforts should strive to improve the learner's legal competencies for obesity prevention and control by focusing on changing the learner's knowledge, skills, values, analytical approaches, and communication strategies.

tenance of healthy eating and physical activity behaviors? What impact do such laws have on dietary and physical activity behaviors, as well as obesity rates? To what extent were public health professionals effective in establishing the public health need for the particular obesity prevention invention strategy that would be implemented under the advocated legislation or regulation? What strategies did public health professionals employ to advocate and justify the legislation or regulation advocated? What stakeholders, if any, did public health professionals engage in the development and advocacy of the legislation or regulation? To what extent were public health professionals successful in accurately characterizing the public health outcomes that would result from the legislation or regulation advocated? To what extent were public health professionals successful in engaging stakeholders legally responsible for implementing the requirements of the obesity intervention strategy under the legislation or regulation advocated?

These types of empirical questions frame the evaluation of legal competency. To answer these questions will require innovative and more collaborative evaluation design approaches, including a variety of qualitative and quantitative methods. Caution must be given to purely quantitative assessments. That is, the *use*, itself, of any specific legal tool does not automatically indicate legal competency since competence requires both the ability to use law effectively and the ability

to discern when a potential legal approach is *not* warranted or appropriate. The evaluation focus should never lose sight of the holistic competency approach of knowledge, skills, values, analysis, and communication. Assessments will require assistance from evaluators skilled in measuring competencies.

Evaluation activities should take place concurrently with implementation. More importantly, the team will need to disseminate lessons learned along the way. Sharing lessons learned is essential since not all local governments will have the resources and capabilities to carry out optimal evaluation exercises. Furthermore, cross-disciplinary funding sources will be needed to not only develop strong evaluation capacity for legal competency, but also, reliable and valid instruments that can be easily tailored and implemented.

Progress in education and technical assistance in legal competency itself should be monitored. To what extent do current professionals and students have access to training and support in legal competency for obesity prevention and control?

At the *individual level* — professional or student, an assessment of legal competencies can occur through academic evaluation, workforce hiring, job performance appraisals, and promotion evaluations.⁵

At the *public health*, *law*, *and other discipline level*, measurement of discipline specific competencies and the use of example action items should be examined. A more meaningful evaluation might distinguish dis-

ciplines further by specifically assessing school board decision makers separate from local planning board members apart from state legislators. Evaluation should also assess the level of engagement and collaboration across disciplines. Who is and is not connecting? Who is resisting versus who is helping facilitate connections?

At the *federal*, *tribal*, *state*, *and local level*, legal competencies can be assessed by the pertinent jurisdiction's appropriate use of legal tools to prevent or control obesity and the relationship between the jurisdiction's legal framework and its obesity rates and trends.

The tools to build competency in this field should be revisited on a periodic basis to ensure continued reflection upon necessary knowledge, skills, values, analytical approaches, and communication strategies imperative to prevent and control obesity.

Conclusion

Legal competence is critical to the successful prevention and control of obesity. To ensure legal preparedness for obesity prevention and control amongst public health, law, and other relevant professionals, we must help build the necessary knowledge, skills, values, analytical approaches, and communication abilities. We must also build the capacity to evaluate the effectiveness of measures once implemented. By providing tangible and measurable examples, this framework should strengthen competencies among public health, law, and other relevant professionals. A key ingredi-

ent to success will be the ability of all relevant disciplines to work together to use law and public policy to prevent and control obesity. Collaboration can occur through sharing resources, creating joint programs and policies, and/or developing multidisciplinary evaluation tools. For those seeking to respond to the obesity epidemic, this agenda can serve as a starting template to: assess cross-disciplinary capacity in their particular context, including learning the legal tools or the health implications; take action to strengthen it; and develop specific plans for their implementation and evaluation. Each team should aim to share their findings — both the exciting triumphs and the disappointing trials — with the larger community.

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Table 3

Criteria for Selecting Model or Sample Policies, Best Practices, and Case Studies as Educational Tools for Improving Legal Competencies in Public Health, Law, and Other Professionals

EDUCATIONAL TOOL	PURPOSE	CRITERIA
Model or Sample Policies	Model or sample policies provide tangible, obesity related examples that can assist users in creating similar policies to fit their particular needs. A model or sample can help to improve legal competencies by providing practitioners and students an example policy to analyze and use in relevant learning exercises such as how to communicate this policy to relevant decision makers or what stakeholders have a stake in this policy and what approaches can public health officials use to engage these other stakeholders in this policy.	 Meets the relevant legal requirements. Based on the best available evidence, when possible, and provides the rationale and references in supporting documents, links, or footnotes. Provides resources to assist in the development, implementation, and evaluation of the policy. Includes individuals or organizations that could provide technical assistance or support. Documented political success (i.e., was introduced, enacted, or is backed by a critical mass of relevant stakeholders). Emerges from existing policies from exemplary states and local governments around the country. Has a strong likelihood of enactment in multiple jurisdictions. Can be flexibly implemented.

EDUCATIONAL TOOL	PURPOSE	CRITERIA
Model or Sample Policies, continued		 Accounts for diverse socioeconomic contexts and/or significant cultural differences. Provides supplemental information on how it should be used and discusses any foreseeable modifications a user might need to make based on a different jurisdiction's governance, political ideology, geography, or socioeconomic status. Emphasizes that the user can modify the language to meet the user's unique circumstances, challenges, and opportunities. Includes an assessment tool that will enable the user to assess their readiness to use the model policy and the appropriateness for the model in their circumstances. Discusses possible strategies for getting the model enacted, implemented, and evaluated. Includes alternative policies and cost-effectiveness analyses.
Best Practices	Best practices identify a way or method of successfully accomplishing a legal strategy to obesity prevention and control. Best, as well as least effective or problematic practices, can help to improve legal competencies by providing practitioners and students an example practice that has emerged as a "gold standard" to analyze and use in relevant learning exercises such as what are the necessary knowledge, skills, and values necessary to effectively develop, implement, and evaluate this particular practice.	 Highlights the legal and policy components and rationale, not just an explanation of the practice or program. Based on the best available evidence, when possible. Represents a diverse national sample. Notes how local and state variation might effect implementation or evaluation. Identifies less effective or problematic practices. Shares legislative hurdles to why a law did or did not pass.
Case Studies	A case study is a method of learning about a complex instance by using a comprehensive process of explaining and describing the instance. A case study or a series of case studies can help to improve legal competencies by providing practitioners and students an extensive assessment of one or more examples and explaining the relevant legal strengths and weaknesses of the approach. As more case studies emerge explaining a successful or unsuccessful legal approach to obesity prevention and control, a casebook might develop as a key tool in legal competency for obesity prevention and control education. This book might be tweaked depending on the intended user. In other words, law students might have a casebook that includes more statutory analysis and hypotheticals whereas a public health book might include more references to program implications and potential research questions.	 Highlights one or a variety of legal and policy approaches used throughout the country. Represents diverse geographical, socioeconomical, cultural, and political contexts. Provides a series of questions that an instructor or the reader can consider when analyzing the case study, individually or as part of a collection of case studies. Points out reference legal analogies, such as an approach used in quarantine, automobile safety, or food safety, and explains the similarities and differences. Includes relevant legal issues and possible research studies or questions that would relate to the case study for further critical thinking. Evidence-based, when possible.

Improving Coordination of Legal-Based Efforts across Jurisdictions and Sectors for Obesity Prevention and Control

Aviva Must, Gary Bennett, Christina Economos, Elizabeth Goodman, Joe Schilling, Lisa Quintiliani, Sara Rosenbaum, Jeff Vincent, Marice Ashe

This paper is the companion to the "Assessment of Coordination of Legal-Based Efforts across Jurisdictions and Sectors for Obesity Prevention and Control" paper, and the third of four papers outlining action options that policymakers can consider as discussed as part of the National Summit on Legal Preparedness for Obesity Prevention and Control. The goal of this paper is to identify potential action and policy strategies related to coordination across jurisdictions and sectors that can be adopted by policymakers and implemented by practitioners to address the obesity epidemic. The paper examines collaboration among four sectors — community agencies and organizations (with a special focus on enhancing the built environment), schools, health care institutions, and workplaces — and examines collaboration from both vertical and horizontal perspectives. Additionally, the paper is structured around three legal themes — which are posed as questions — to frame the policy action discussion:

• What is the extent of authority, and who has it?

- How can coordination or collaboration be facilitated?
- How can implementation and enforcement of policy strategies be ensured?

The multi-factorial nature of obesity risk factors requires the involvement of a wide range of organizations that cut across disciplines for prevention and control efforts. The coordination required to meet these public health needs occurs under many guises and through various legal mechanisms. When the government, with its considerable economic power, addresses a pressing public health issue like obesity, it employs three primary approaches: (1) it mandates action or regulates public and private sector behavior, e.g., seat belt laws; (2) it induces voluntary action by providing funding or other incentives tied to desired outcomes, e.g., Coordinated School Health Program and the ACHIEVE program; or (3) it leverages its informational and educational influence to shape responses of citizens and the private sector, e.g., Surgeon General Reports.

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Government action can range from extensive regulatory schemes to more informal and cooperative engagement. Further, even when regulation by a federal agency is extensive, these same agencies often delegate authority to administer the federal rules and otherwise share power with state governments. Under a federalist system, a more nuanced kind of collaboration occurs, often characterized by a tight regulatory regime. Similarly, although many day-to-day public health functions are established by state law, their administration and enforcement are carried out by county and city health departments.

When the private sector addresses public health issues such as obesity, it too uses its economic power to drive outcomes. For instance, companies require measurable returns on their investments when implementing wellness programs and will utilize incentives such as reimbursement schemes to encourage employee participation in corporate weight loss or other health promotion programming.

What Is the Extent of Legal Authority, and Who Has It?

Effective action to address the obesity epidemic must be undertaken by an entity that has the requisite authority to act. In general, governmental agencies have broad authority to act in the interest of the health, safety, and welfare of the public. This police power, as outlined in the Laws and Legal Authorities paper, gives governments the ability to take action in the public interest, including engaging in publicprivate partnerships or by enacting laws or regulations to address targeted public health issues. In fact, the protection of public health is a core exercise of the police power.1 In many instances, this power is executed among multiple governmental agencies. For instance, under the Family Educational Rights Protection Act (FERPA) both state and private educational authorities and the U.S. Department of Education coordinate action to protect student records. If those records contain information related to a disability claim for a child with extreme obesity, coordination with additional jurisdictions and sectors (e.g., health law attorneys and social workers) becomes necessary.

Examples of the needed authority to prevent and control obesity by sector include the following:

- Communities: Urban Design and Land Use Zoning to Improve Health
 - Empower local governments under state law to enact and update comprehensive land use plans with obesity prevention elements (such as has been done in California, Oregon, Washington, and some other states).
 With this approach, local decision-making is guided by smart growth principles such as "walkable" and "bikeable" communities.
 - Demonstrate how state governments can offer fiscal/financial incentives to local governments to regularly revise and adopt comprehensive land use plans with obesity prevention elements.²
 - Participate in environmental review laws (e.g., the National Environmental Policy Act) to require local public health and urban planning departments to conduct public health impact assessments for new developments.
 - Demonstrate how state and local authorities can offer economic development incentives and permit streamlining for development projects that foster and improve access to healthy foods to address the "food desert dilemma" found in many underserved communities.

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- Advance state and local laws to limit *siting* of quick-service restaurants within one mile (or some reasonable distance) of a public school.
- Empower appropriate authorities with expanded authority to regulate healthy foods such as requiring mobile vendors to sell produce and other healthy snacks or prohibiting the *siting* of new quick-service restaurants in neighborhoods with a disproportionate share of such facilities.
- Schools: Joint Use Agreements to Improve Community Health Outcomes
 - Educate and encourage joint use agreements by state and local education agencies. Local education authorities have broad discretion about whether and how to collaborate with other sectors of government or community organizations. To date, joint use agreements, such as those discussed in the "Assessing Coordination of Legal-Based Efforts across Jurisdictions and Sectors for Obesity Prevention and Control" paper that enable schools to formalize shared ownership and/or maintenance of school facilities for broader community use during after-school hours are relatively rare. State-level policy that encourages such use could improve opportunities for schools to collaborate with local partners to meet broader community needs; this would be particularly helpful in more disadvantaged communities where there are often fewer options for safe and inviting places to engage in physical activity.
 - Garner buy-in from local educational authorities by leveraging incentives for joint use arrangements as the best option to open school facilities for after-school use. Use of the community's recreational department, capital funds, supplemental grants, costsharing arrangements, and private philanthropy represent potential models to implement or underwrite the costs of these efforts (without interfering with an educational mandate).
- **Health Care:** Monitor and Referral to Improve Access to Care and Treatment
 - Establish coverage for comprehensive obesity counseling and health interventions for children identified as overweight or obese under state Medicaid and SCHIP programs.
 - Identify obesity reduction initiatives as a condition of award to local health agencies

- and other program recipients under Title V maternal and child health programs.
- Consider classifying obesity as a reportable health condition in children and establish online registry systems so that accurate estimates can be drawn across health care sectors, including physicians offices, schools, and other settings in which health and developmental assessments in young children, school-age children, and youth are completed.
- Incentivize states to work with their community health center primary care associations to provide obesity prevention and treatment services in medically underserved communities.
- Permit states to prohibit insurers from underwriting obesity as a health condition in its own right in the small group and individual markets.
- Encourage nonprofit hospitals governed by §501(c)(3) obligations to implement obesity prevention and management initiatives.
- Require managed care organizations, as a condition of participation in Medicaid and SCHIP, to offer childhood obesity prevention and treatment services.
- Encourage state Medicaid and SCHIP programs and public and private employer sponsored group benefit plans to uniformly adopt pay-for-performance incentives to promote higher quality performance in obesity prevention and management at the clinical practice and health system level.
- Make accommodation of obese patients a consideration for accreditation by the Joint Commission (formerly, the Joint Committee on the Accreditation of Hospitals).
- Workplaces: Use of Incentives and Wellness Programs to Improve Employee Health
 - Leverage tax incentives to attract companies with demonstrated success in promoting workplace wellness, as well as to motivate existing organizations to develop robust obesity prevention offerings. Such incentives may be especially beneficial to smaller employers and those employing a disproportionate number of persons at risk for or experiencing chronic diseases.
 - Allow local, state, tribal, and federal authorities to offer tax and financial incentives to corporations to prompt or expand support of communities, schools, and health care

- organizations for the implementation of obesity prevention strategies. For example, incentives might be structured to both motivate and reward organizations for contributions made to support school-based obesity prevention efforts or to reduce obesogenic factors.
- Provide federal tax deductions to individuals to minimize costs associated with participation in non-subsidized workplace wellness offerings.
- Integrate, at the state and national levels, obesity prevention and control strategies into existing policies (e.g., OSHA regulations to incorporate in workplace safety activities, the SAFEATEA transportation bill for safe routes and bicycle paths).

The U.S. government operates under the core principle of federalism. Federal, state, and local laws outline the respective roles and responsibilities for each level of government depending on the public policy issue. In some areas, such as national defense and regulation of interstate commerce, the federal government reigns supreme, but even in these areas, Congress can identify opportunities to share that power with state and local governments. Implementation of initiatives that moves from the top-down and include all levels of government is often called vertical policy integration. Government interventions often require coordination among agencies charged with slightly different missions; this is often called horizontal policy integration. Examples of agencies and other entities that could coordinate in these ways are offered in Tables 1 and 2. Furthermore, although state and local governments have broad authority to enact and enforce laws, the authority is not unlimited. For example, under the Supremacy Clause of the U.S. Constitution, federal law can prevail over, and thus preempt, contrary state and local law3 and under state constitutions, state law can preempt local laws. The legal principle of preemption is discussed in greater detail in the companion papers on Laws and Legal Authorities.

To address questions of preemption, the benefits and risks with regard to the level of government best suited to take action must be evaluated. For example, the benefit of federal or state preemption is that the government establishes a consistent and uniform set of standards that protect individuals and foster equitable policy implementation. The risk of such preemption is that local authority cannot respond to the specific communities needs.

Community

- Ensure a certain level of uniformity and expansion of federal, tribal, state, and metropolitan/regional transportation planning and funding to foster more transit-oriented development that promotes compact and walkable neighborhoods.
- Establish minimal levels of public health and safety protections under state housing and building codes.
- Provide incentives to maintain or revitalize town centers, especially in rural areas, to stimulate physical activity and improve healthful food options.

• Schools

- Encourage state governments to follow the lead of California, Rhode Island, and Arkansas, by enacting nutritional standards for foods sold in competition with school breakfast, lunch, and snack programs (known as "competitive foods") with the goal of having more states requiring standards for beverages and snack foods sold on K-12 campuses nationwide.
- Ban sole source vending contracts.
- Standardize physical education requirements so that all students have meaningful levels of training and engagement.
- Provide school health obesity prevention and treatment grants.

• Health Care

- Design a uniform national benefit that includes evidence-based obesity prevention and management benefits as part of universal coverage; empower states to require greater protections (HIPAA preemption standard).
- Expand health centers to include child and family obesity prevention and treatment services in all medically underserved communities.
- Coordinate with schools to implement programs funded under school health obesity prevention and treatment grants.

Workplaces

- Leverage federal and state tax incentives to encourage comprehensive workplace health promotion programs.
- Reconcile state variation in policies related to the legal recognition of workplace discrimination based on employee weight.

- Strengthen anti-discrimination policies so that they remain an important component of efforts to maintain workplace equity, yet do not constrain the ability of workplace health promotion programs to provide incentives for healthful employee behavior change.
 Implement by-pass provisions to ensure that innovation in behavioral intervention science is appropriately reflected in program design.⁴
- Mandate, under state building codes, minimum standards for commercial building codes that incorporate obesity prevention principles.

The risk of preemption is that local and state innovations can be squelched, thus inhibiting experimentation with new ways to address recalcitrant problems, like weight control. For example, when smart growth principles are not supported or are undermined by private sector development, de facto *taking* and *eminent domain* can result. Therefore, coordination of efforts across jurisdictions and sectors should include a focus on the benefits and strengths of cooperative federalism whereby express preemption statutes include, in the legislation, a "savings clause" providing that relevant state laws are not preempted as long as they are *more* protective than the federal law. In these cases, the federal law sets a minimum, or "floor," that the state law can build upon.

If preemption analyses answer questions of "vertical" authority between different levels of government and private sector stakeholders, questions of "horizontal" authority can arise between agencies at the same level of government or between private and public organizations. Policymakers and staff will need to identify shared interests, formulate mutual goals, and draft agreements that share power and outline roles and responsibilities. For example:

Community

- Participate in smart growth "blueprint" projects throughout California by Regional Councils of Government to jointly plan for urban growth boundaries, regional transit commitments, "green" development standards, access to open space and other amenities in the built environment that affect public health.
- Use of Municipal Joint Powers Agreements, found in different forms in all 50 states, to administer a broad range of government services, including health care delivery, park access and maintenance, transportation agencies, and the like.

 Support healthy food coalitions, such as The Food Trust in Philadelphia which manages a public-private partnership that brings healthy foods into low-income communities.⁵

Schools

Employ joint use agreements with local governments is a classic example of horizontal integration. Not only can joint use agreements be established between government agencies such as school and park departments, but they also can be established between schools and nonprofit organizations such as YMCAs or youth soccer leagues to supervise and manage on-site programming.

• Health Care

- Share of BMI screening data collected in schools by school health personnel with students' health care providers.
- Extend communication from schools to communication with community organizations and workplace managers to create linkages to comprehensive wellness programs in those settings.
- Facilitate information sharing in ways that address individual privacy concerns while providing access to meaningful data (e.g., the Privacy Rule of the Health Insurance Portability and Accountability Act).

Workplaces

 Provide guidance as to whether workplace health promotion for state employees represents an unfair benefit for state workers. If not, these could become model programs.

How Can Coordination Be Facilitated?

Any plan that calls for increased government action must address how coordination will occur. The legal term for collaborative processes implemented by government agencies is "procedural due process" which arises from the Fifth and Fourteenth Amendments of the U.S. Constitution and which is replicated in each state's constitution. Procedural due process ensures the transparency of government actions, allows for public participation in democratic governance, and can require cross-jurisdictional consultation and review. Many states have established laws (often called "sunshine laws") to ensure that state and local government agencies make policy decisions consistent with the due process guarantees of adequate notice and a fair and open public hearing process. Procedural due process is a flexible concept that can result in various innovative strategies to ensure that public health goals are promoted throughout government action, whether by traditional command-and-control rulemaking or the development of voluntary public-private partnerships.

Community

- Require or otherwise encourage local public health departments to weigh in on the health impacts of land-use decision-making to ensure public health interests are protected and promoted by private and public developers.
- Develop strong nutrition standards on which
 to assess and evaluate government contracts
 for the purchase of food for hospitals, prisons, schools, or other facilities (e.g., NYC
 Health Code § 41.36, requiring menu labeling in all food service establishments). Create
 incentives through the public contracting
 process, to allow public bidding processes
 for private sector food vendors to improve
 the nutritional quality of the foods served in
 these institutions.
- Cultivate expertise and provide resources for community gardening, composting, and recycling.

Schools

- Incentivize schools and other agencies to work together to find appropriate sites for new (or newly rehabilitated) schools — sites that are located to encourage walking/biking to school and are in close proximity to the neighborhoods they serve.
- Incentivize new schools, at the time of *siting*, to discuss joint use (or co-location) possibilities during the planning stages. Devise a good faith process so that the parties cannot conclude it "will not work" before an honest attempt to cooperate occurs.

• Health Care

 Require hospitals, community health centers, and for-profit clinics to work together to prevent duplication of services and to make sure all sectors of society are reached.

Workplaces

 Encourage public health agencies at the state and local levels to work with municipalities to integrate obesity prevention principles into commercial building codes and tax incentive policies. Clarify the language and exceptions noted in applicable laws pertaining to the offer of incentives in workplace health promotion programs. These laws include Health Insurance Privacy and Portability Act, Employment Retirement Income Security Act, and Americans with Disabilities Act at the federal level and anti-discrimination laws at the state level.⁶

How Can Implementation and Enforcement of Policy Strategies Be Ensured?

All too often legislation is passed that is predominantly aspirational in nature. Lofty language is used in the intent of the legislation to address a vexing public health problem such as obesity, but two fatal flaws often occur: (1) no financial resources are committed to address problem, and (2) no enforcement provisions are included.

When legislatures pass unfunded mandates, or otherwise fail to adequately finance public health programs, the resulting legislation does little more than acknowledge that a problem exists. Although such acknowledgement may represent an important first step in incremental change, a national action plan must call for adequate financing of obesity prevention measures and programs. For example:

Community

- Expand infrastructure development and repair to enhance smart growth principles, such as in Maryland's Priority Funding Areas program. In this statewide effort, "priority funding areas" receive financial support from the state for building or repairing municipal infrastructure and promoting economic development opportunities.
- Enhance state redevelopment law to require a percentage of Tax Increment Financing (TIF) generated in redevelopment districts to be dedicated towards smart growth developments, playground construction and repair, bike lanes, and other infrastructure needs in under-resourced communities.
- Expand support of farmers markets and community gardens via the Farm Bill or federal appropriations.

Schools

 Provide federal grants, awarded through an appropriate state level agency, to local planning teams to support joint use planning processes.

- Offer a financial match for school capital improvement funds to encourage states to engage in joint use activities. Opportunities for joint use activities would be greatly expanded if these other governmental or community partners offered in-kind services or ongoing programming instead of financial contributions.
- Educate states about the positive health and educational achievement outcomes of providing capital development funds to supplement school facilities financing to incentivize joint use developments. Adopting a model to finance outdoor recreation similar to those in place in some states to finance classrooms, libraries, and community theatres.

• Health Care

Provide reimbursement for obesity prevention and counseling.

Table I

Coordination for Obesity Prevention and Control: Examples of Vertical Policy Integration

Federal Government	USDHHS (CDC, NCHS, HRSA, CMS, NIH, ACF), Indian Health Service, USDA, FDA, DOE, DOT, FCC, FTC
State Government	Departments of health/public health, education, transportation, revenue
Local and Regional Governments	Metropolitan planning organizations, cities/ towns, counties, economic development authorities, special districts, school boards and districts, planning boards, environmental and resource agencies and committees

USDHHS: United States Department of Health and Human Services

CDC: Centers for Disease Control and Prevention

NCHS: National Center for Health Statistics

HRSA: Health Resources and Services Administration

CMS: Centers for Medicare & Medicaid Services

USDA: United States Department of Agriculture

FDA: Food and Drug Administration

DOE: Department of Education

DOT: Department of Transportation

FCC: Federal Communications Commission

FTC: Federal Trade Commission

Workplaces

Provide fiscal incentives in the form of tax rebates or other financial awards to facilitate the adoption and maintenance of workplace health promotion programs. The Healthy Workforce Act7 (pending) directly addresses this issue by providing a tax credit for the cost of a qualified workplace health promotion program of up to \$200 per employee for the first 200 employees, and up to \$100 per employee for the remaining employees. These types of incentives could expand access to workplace health programs to workers who currently have less access (i.e., those who work part-time, earn less than \$15/hr, are blue-collar workers, and work for employers employing fewer than 100 workers).

Likewise, the good intent of legislation becomes meaningless if it does not include strong enforcement language such as incentives for action or penalties for

failure to take action. As observed by John Adams almost two centuries ago, "[L]aws are a dead letter until an administration begins to carry them into execution."

Compare, for example, the No Child Left Behind Act8 with the local school wellness policy provisions of the Child Nutrition and WIC Reauthorization Act of 2004.9 No Child Left Behind with its sweeping standards-based reform and standardized testing to measure school accountability has reverberated in every school system due to fear of financial penalties for under-performance.10 By way of contrast, as of July 2006, every school system was to have on file a school wellness policy designed to address several laudable goals. However, since the local wellness policy provision did not include any enforcement or reporting requirements, it is difficult to assess whether schools have complied.11 Furthermore, the mere filing of such policies is not likely to have any real impact if dollars for implementation are lacking. Any national action plan to prevent and control obesity will need to support redrafting of the school wellness policy to include meaningful implementation and enforcement provisions.

Finally, implementation and enforcement of policy strategies can be ensured by systematically collecting information on best practices — i.e., which legal frameworks are most effective in at least potentially preventing obesity. A 50-state survey can provide the range of possible options to promote obesity prevention and control, as well as model legislation and identification of best practices. Some specific areas where such an all-state scan would be helpful include: (1) revenue raising approaches, e.g., fees and taxes, to incentivize desired behaviors and fund obesity prevention programs; (2) state and local land use regulations to increase access to healthy foods; and (3) tort

liability provisions that incentivize workplace wellness programs, such as on-site exercise opportunities. Collecting and analyzing these sorts of data can facilitate innovation and promote new obesity prevention programming.

Conclusions

Social change movements need to include legal strategies to ensure ultimate success.¹² The success of comprehensive and integrated efforts to prevent and control obesity will require legal approaches to ensure coordination and collaboration of multiple sectors across all jurisdictional levels. Such coordination and collaboration are not always the norm, as government agencies often work solely within the silos of

Table 2

Coordination for Obesity Prevention and Control: Examples of Horizontal Policy Integration

Communities	Schools	Health Care	Workplaces
 Planning/zoning boards School Departments Parks & Recreation Departments Health Departments YM/YWCAs Boys and Girls Clubs Grass roots organizations/ coalitions Councils on Aging Social Clubs/New Americans groups Local agriculture/farms Chambers of commerce (for local business involvement) 	 School Department School Boards Parent-Teacher Assns Professional (teacher) organizations Teachers unions Farm to school initiatives 	 Community Health Centers Hospitals Physician practices Dental offices Veterinarians Health insurers Health professional organizations (AAP, AMA) National voluntary associations (AHA, ADA, ACS) Allied health professionals (PTs, OTs, RDs) Insurance organizations AHIP (Assn of health insurance providers) Assns of insurance regulators (NAIC) and legislators (NCOIL) 	Companies/ Corporations Chambers of Commerce Unions Workplace wellness companies (WELCO, AWHP) Human Resources professional organizations

YM/YWCA: Young Men's/Young Women's Christian Association

AMA: American Medical Association

AAP: American Academy of Pediatrics

AHA: American Heart Association

ADA: American Diabetes Association

ACS: American Cancer Society

PT: Physical Therapists

OT: Occupational Therapists

RD: Registered Dieticians

NAIC: National Association of Insurance Commissioners

NCOIL: National Conference of Insurance Legislators

WELCO: WelCo Health Solutions

AWHP: Association for Workplace Health Promotion

their statutorily defined parameters, and public-private relationships are not common. In addition, legal incentives to ensure that coordination efforts address social justice concerns are crucial, as many of the most vulnerable, including racial/ethnic minorities, economically disadvantaged, individuals living in rural areas, and those of living on reservations, are at risk due to social and economic policies which are beyond individual control to address.

Further, Summit participants were mindful of the need to consider obesity prevention and control in the context of other pressing societal needs. Coordination of obesity prevention and control efforts with those of the environmental movement, for example, could produce strong partnerships, leverage scarce resources, and produce the political will needed to produce the transformational social change that a national action plan will require.

This paper attempted to summarize ideas that emerged over two days of sessions at the Summit, and is not meant to be comprehensive. In fact, several specific sectors are notably absent, including many of which are not traditional public health partners, such as transportation, environmental agencies, and a wide range of business concerns, including but not limited to food, restaurants, and electronic media. That said, we hope that the ideas gleaned from the broad-ranging conversations held during the Summit as outlined in this paper will spur creative thinking and contribute to the policy aspects needed for a national action plan to prevent and control obesity.

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 See Kroplin v. Truax, 119 Ohio 610, 621 (1929); Patrick v. Riley, 209 Cal. 350, 354 (1930). State and local governments have used their police power authority to develop and enact measures to counter obesity, including the following: requiring disclosure of the nutritional content of food served in restaurants; imposing restrictions on the advertising of junk food to children; mandating school nutrition and physical education programs; calling on schools to measure students' "body mass index"; regulating the sale and marketing of junk food in schools; and enforcing mixed-use zoning rules to encourage the dispersal of supermarkets and prevent the aggregation of quick-service outlets improving opportunities and incentives for non-motorized transportation, including "safe routes to school." See Boehmer et al., "Patterns of Childhood Obesity Prevention Legislation in the United States," CDC's *Preventing Chronic Disease* 4, no. 3 (July 2007): at 2 and Table 1, available at httm> (last visited March 5, 2009).

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Improving Information on Public Health Law Best Practices for Obesity Prevention and Control

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his paper is the companion to "Assessment of Information on Public Health Law Best Practices for Obesity Prevention and Control," and the fourth of four action papers produced as part of the National Summit on Legal Preparedness for Obesity Prevention and Control, convened June 2008 by the Centers for Disease Control and Prevention, the Robert Wood Johnson Foundation, and the American Society for Law, Medicine & Ethics. The four action papers present options to address gaps in the four core elements of public health legal preparedness as outlined in the relevant companion papers. The four core elements are: (1) laws and legal authorities; (2) legal competencies for public health professionals to apply those laws and authorities; (3) coordination of law-based efforts across jurisdictions and sectors, and (4) information on public health law best practices. While its companion paper addresses who the stakeholders are and what information they need, this paper addresses the gaps in dissemination strategies, including identification and assessment of effective legal-based efforts, and proposes actions public health professionals can take to improve their access to the information they need to develop, adapt, or implement effective programs.

The national obesity epidemic is a problem of *population* health, and must be addressed at the population, not individual level. Six target areas have been identified as relevant to the obesity epidemic:

- Reduce consumption of sugar-sweetened beverages;
- · Reduce consumption of energy-dense foods;
- Increase consumption of fruits and vegetables;
- Increase physical activity;
- Reduce television viewing; and
- Increase the initiation and duration of breastfeeding.

Changing collective behavior requires changing the environment in which those behaviors occur; possible legal-based efforts include both policy and environmental strategies. Improving public health by changing our social and physical environment through law-based efforts is not a new approach. In an examination of the 10 greatest achievements in public health, laws and regulations played a major role in 9 of them.²

Effective law-based action for obesity prevention and control may mean using a systems approach, rather than following a paradigm of linear cause and effect. A systems approach would emphasize the importance of relationships, especially coordination and partnership development among multiple stakeholders. The multiple stakeholders will typically form an interlooping spider web: "a complex adaptive system with multiple components, where results are often greater than the sum of their parts." Recognizing that everything is interlocked and that nothing should be considered in

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isolation can help minimize unintended consequences and maximize the cumulative effect of interventions.

Who Are the Stakeholders, and What Information Do They Need?

Before one can partner with other stakeholders, one needs to identify them. Some stakeholders may be obvious (e.g., state chronic disease directors) while others may be more obscure (e.g., the state demographer). Table 1 gives examples of some of the stakeholders, considered in terms of both settings (e.g., schools, workplaces) and sectors (e.g., the insurance industry and governmental agencies). Any large stakeholder is not only a potential intervention tool but also a potential target for intervention: for instance, local and state governments are themselves large employers. Trade and professional associations often have great influence on their members; such groups can be invaluable in developing and implementing policy and environmental change strategies. Thus, a setting or sector can serve both as an intervention site and as a fulcrum for policy leverage.

Scope and Types of Population Health Information

Population health information is needed to inform the laws and legal authorities developed to address the obesity epidemic. The relevant population health information, as discussed here, is the collective knowledge needed for public health legal preparedness regarding obesity prevention and control. This information is vast in scope, encompassing many sectors, categories, sources, and subjects.4 The information should be easily accessible, transparent, easy to use, relevant, and available to all stakeholders. Most stakeholders need to be educated on the importance and rationale of emphasizing population-based approaches rather than "personal responsibility." Summit participants discussed the need for surveillance and monitoring, the need for the information on which legal best practices could be grounded — the evidence base — as well as the need to know what constitutes legal best practice.

Surveillance and Monitoring

One type of information needed is basic epidemiologic and surveillance data about the obesity epidemic and its effect on quality of life, health, communities, the workplace, education, health care, industry, society, and the economy. Decision makers need accurate information about the extent of the obesity epidemic and its medical, social, and economic consequences. They also need data as to the effectiveness of strategically targeting obesity in order to decrease the prevalence of other chronic diseases.

Surveillance and monitoring efforts are critical, as they help to identify high-risk populations, identify risk factors, and monitor progress in reducing the prevalence of obesity. Some surveillance systems are already in place at the national, state, and regional levels (see Table 2), as is at least one longitudinal study, Healthy Passages.⁵ Such longitudinal studies are particularly useful in examining behavioral, social, and environmental risk factors. At the state level, some states are using electronic health records to track health information, particularly among children. Such records can be set up to allow for epidemiological analysis and population-level surveillance of overweight and obesity. Regional and local governments are also attempting to accumulate the needed data. However, many of the existing surveillance and monitoring efforts and ongoing longitudinal studies are threatened by funding cuts.

As both a surveillance technique and an intervention, some states have enacted legislation requiring at least some schools to measure each child's BMI and give the information to parents in a "health report card." Arkansas was the first to pass such legislation,6 in 2003, and saw its escalating childhood obesity rate level off in three years.7 However, school administrators protested the time involved, and parents became increasingly concerned. As a result, an amendment in 2007 eliminated BMI assessments for high school seniors and children in odd-numbered grades; parents can choose to have their child excluded in the other grades.8 Several other states have instituted programs for selected grades, many on a pilot basis. In New York, the data will be used by the Department of Education to create a profile of the state's childhood obesity and obesity-related diseases.9 In Houston, administrators report that parents welcome having their child's BMI included on report cards (private communication).

Knowledge Base

The knowledge base of effective law-based interventions is still nascent, and creating the evidence base upon which good decisions can be made, and supported, is critical to effectively combating this epidemic. The Robert Wood Johnson Foundation annually reports the various law-based actions each state (and some cities) has taken to promote nutrition, increase physical activity, and prevent obesity. It is unlikely that any single one of these interventions will by itself reduce a state population's rates of obesity. But while they may not be *sufficient*, many of these approaches may be *necessary*. Noticeable population-level change is likely

to require comprehensive, coordinated efforts across jurisdictions, settings, and sectors.

Many of the strategies which have brought a large number of stakeholders to the table have relied on voluntary cooperation rather than on law-based actions. While such agreements can be difficult to enforce, they may prove the most fruitful approach. Examples include the memoranda of understanding (MOU)¹² brokered by the Alliance for a Healthier Generation, which is a joint initiative of the William J. Clinton Foundation and the American Heart Association. In the first MOU, the American Beverage Association, Cadbury-Schweppes, Coca-Cola, and PepsiCo voluntarily agreed to new nationwide guidelines for school beverages, including calorie density, portion size, calorie counts, and sweetening levels.13 Under this MOU, the results will be evaluated with an annual analysis by a named third party; this data can then become an important part of the evidence base for policymakers. A second MOU with different partners addressed competing foods sold to school children.14

Finding the needed information and evaluating the relative effectiveness of different approaches can be a challenge; some basic information sources on the Web are listed in Appendix A. Summit participants suggested the creation of an information clearinghouse on best available and promising practices, not simply "best practices." Policymakers need data on the effectiveness of laws and policies as well as their social and economic costs and benefits. Multiple toolkits have been developed to aid in particular objectives (see Appendix A), but there is no one, central "go to" Web site. Existing Web sites are for the most part targeted at a specific sector or setting. For example, the National Governors Association (NGA) Center for Best Practices has developed Shaping a Healthy America, a Decision Making Guide. 15 The NGA Center evaluates public policy innovations and ensures that all governors are aware of these advances. Similarly, the Robert Wood Johnson Foundation's Active Living Research initiative¹⁶ seeks to identify environmental factors and policies that influence physical activity for children and families and to use this information to inform effective prevention strategies. Each sector needs to know what others have already recommended. For instance, the Institute of Medicine, the American Academy of Pediatrics, and the American Academy of Family Practitioners, among others, have issued recommendations for one or more of the six identified areas of behavior relevant to fighting the obesity epidemic. Summit participants strongly suggested informing public health practitioners and other stakeholders of these recommendations.

Web sites are excellent ways to ensure stakeholders have the information they need. Summit participants identified two gaps:

- There is no easily accessible Web portal that identifies best practices and resources available across sectors and settings.
- Information about what does not work is usually not reported.

To promote sustainability, expediency, and efficacy, and to avoid reinventing the wheel at the micro level, Summit participants identified the following informational action items that could be implemented by agencies of the federal government:

- Develop a Web portal that is devoted to legal and policy practices, both what has worked and what has not. "What works" is not necessarily aimed at obesity prevention and control; the law of unintended consequences (in a complex system, you can never change just one thing) sometimes carries bonuses. For instance, teen physical activity programs may result in a decrease in teen pregnancy rates.
- Detail how policy strategies can have a positive economic impact and how some strategies can have positive effects on other health and social outcomes.
- Document also how *not* acting can have negative economic effects. While some consider "anecdotal evidence" an oxymoron, such realworld tales can sometimes convey a point more quickly and persuasively than any number of statistics. An example from the conference: a large employer decided *not* to build a factory in a major city because of the population's thirdgrade obesity rates. Off the record, the CEO explained that he did not want to be hiring that work force in 20 years, because he did not want to be dealing with their retiree medical costs in 50 years. Policymakers need to be similarly long-sighted in implementing measures that promote health rather than fostering obesogenic environments.
- Create a central listing of funding sources and resources.
- Collect and improve the research base of what programs work, under what circumstances, and what approaches appear *not* to have worked in what circumstances.
- Develop tools and tool kits to assist decision makers in implementing strategies. Tools needed include:

Table I

Examples of Stakeholders

Settings

Communities

Churches and other faith-based organizations

Community organizations, groups, clubs

Neighborhoods (homeowners associations)
Residents

Children's Environments

Daycare and after-school programs

Schools

Parents

Food Environments

Convenience stores

Farmers markets

Fast-food and other restaurants

Grocery stores and supermarkets

Discount "megastores" that sell food

Health Care Environments

Hospitals and clinics

Physical Activity Environments

Parks, recreational facilities

Workplaces

Sectors

Advertising industry

Agriculture

Education

Employers

Food and restaurant industry

Food distribution systems

Governmental agencies at local, state, and federal levels, including transportation, health, food and drug,

education, communications, commerce

Health care system

Insurance industry

Legal sector

Leisure and sports industry

Media

Professional associations and certification boards

(doctors, lawyers, hospitals, colleges, et al.)

Transportation systems (manufacturers, regulators, planning agencies, funding entities)

Urban and rural land-use planning boards, zoning commissions

Table 2

Existing National Surveillance Systems

Population-based. NHANES: National Health and Nutrition Examination Survey. Updated annually since the early 1960s by CDC, it provides population-based data derived from private interviews and extensive non-invasive individual health exams. U.S. national obesity prevalence rates are based on NHANES data. http://www.cdc.gov/nchs/nhanes.htm

State-based. BRFSS: Behavioral Risk Factor Surveillance System. Conducted by CDC since 1984, it is the world's largest on-going telephone health survey system. Monthly data collection allows each state to closely monitor trends in its population. Data include health risk behaviors, preventive health practices, health care access, and health conditions. http://www.cdc.gov/BRFSS/

School-based policies. SHPPS ("ships"): School Health Policies and Programs Study. This national survey is done at six-year intervals (most recently in 2006) to assess school health policies and practices at all levels (state, district, school, and classroom). Data include physical education, food services, and health service policies. http://www.cdc.gov/HealthyYouth/shpps/index.htm

High school students. YRBSS: Youth Risk Behavior Surveillance System, which uses the YRBS (Youth Risk Behavior Survey, conducted by CDC) to monitor priority health-risk behaviors, such as obesity, and asthma among high school students. Data include nutrition and physical activity. http://www.cdc.gov/HealthyYouth/yrbs/index.htm

Infants and young children. PedNSS: Pediatric Nutrition Surveillance System and its companion the PNSS (Pregnancy Nutrition Surveillance System) monitor the nutritional status of the women, infants, and children up to age 5 in federally funded maternal and child health programs. Data describe prevalence and trends of nutrition, health, and behavioral indicators. http://www.cdc.gov/pednss/

Longitudinal study of adolescents. Healthy Passages: A 10-year community-based longitudinal study of adolescent health (beginning in fifth grade, roughly age 10) being conducted with over five thousand children and their parents in Birmingham, Houston, and Los Angeles. Data will allow identification of behavioral, social, and environmental risk factors. Funded by CDC and other Federal agencies. www. healthypassages.org

- Model legislation, policies, and agreements;
 and
- How best to work with legislative committees.

Setting-Specific Actions

Many of the information action items identified by Summit participants are for specific settings (see Table 1). For clarity, these will be discussed by setting.

School Settings

The school setting can be used to affect obesity rates for both school-aged youth and adults (parents, teachers, and school staff). In 2006, over 54 million children were enrolled in some type of school setting, ¹⁷ and school systems are some of the larger employers in many states. Unfortunately, many schools often have poor food environments¹⁸ and limited time for physical activity. A variety of stakeholders have already taken the lead in implementing promising strategies such as school nutrition, physical activity, and nutrition education programs and policies. Informational issues for schools include the need to:

- Explore the implications of providing to students, parents, or both student health evaluations that include BMI or height/weight evaluations.
- Consider pilot programs to provide parents and communities with school health reports, on an aggregate school- or district-wide basis.
- Address the issues raised by FERPA (Family Educational Rights and Privacy Act) as it relates to using school health records for public health surveillance purposes.
- Increase schools' knowledge of federal reimbursement regulations with respect to school meal programs, to maximize school reimbursement while improving student nutrition.
- Mandate calorie labeling on school menus and in school cafeterias; provide this information to parents and parent-teacher associations as well.
- Develop model programs to improve standards in school nutrition programs.
- Share such programs as have been developed.
 For instance, the Houston Independent School District (HISD) has created "CHOMP, Choosing Healthy Options Means Power: Houston ISD's Plan for Nutrition and Wellness Leadership."

 The plan includes a five-year strategy and timeline for completely revising the school menus and the foods available a la carte, and a comprehensive strategy to communicate with, solicit input from, and educate the community (private

- communication). Each aspect of the plan has a vision, a goal, the actionable items required, and a timeline of evaluable benchmarks. However, perhaps because parts of the plan are still being drafted, there is no access to these documents over the Web.
- Create model vending machine contracts, using the beverage and food industries' voluntary guidelines as a floor (not a ceiling)¹⁹ and incorporating the recommendations of the American Academy of Pediatrics with other school districts across the country.
- Establish physical activity and education requirements (e.g., intensity and duration) and physical education requirements (e.g., motor skills and movement patterns) for all ages, and determine the effect of implementing such requirements on various measures of academic achievement and school attendance.
- Evaluate the effectiveness of worksite wellness programs for teachers and staff.
- Investigate existing programs for improving how the built environment supports physical activity for both students and their parents by, e.g., working with local community groups to turn school grounds into neighborhood parks (the SPARK school park program²⁰ in Houston, Texas), implementing the Safe Routes to School program,²¹ or adopting the Kids Walk-to-School campaign²² from CDC's ACES (Active Community Environments Initiative).²³

Medical and Clinical Settings

While medical and clinical settings are an obvious intervention point, not only for patients but for their own employees, there are also many informational issues that need to be resolved:

- Assess what would be necessary to ensure full coverage of EPSDT (the early periodic screening, diagnostic, and testing program), along with appropriate counseling services under each state's children's health insurance program (CHIP).
- Clarify coverage for prevention, screening, counseling, and treatment of overweight and obesity under federal and state laws, e.g., ERISA (the Employee Retirement Income Security Act of 1974), the Social Security Act, and the Americans with Disabilities Act.
- Investigate reimbursement options under Medicaid, Medicare, and commercial insurance plans for obesity prevention, screening, counseling, and treatment.

- Evaluate the cost, if coverage for medical treatment of morbid obesity is mandated; consider requiring coverage of behavioral and nutritional counseling and prescription medications whether or not bariatric surgery is performed, in alignment with the current clinical practice guidelines.²⁴
- Explore legal approaches to removing barriers to accessing care for those who are obese or at risk of being obese (e.g., few health care providers have scales or waiting room chairs that can accommodate patients over 300 pounds).
- Update and make available clinical practice guidelines for obesity prevention and treatment.
- Review the extent to which accreditation, accountability, and licensure processes promote provision of obesity prevention and reduction services by health care providers to their employees.
- Consider adding a measure to HEDIS (Healthcare Effectiveness Data and Information Set, from the National Committee for Quality Assurance) that encourages health care practitioners to address weight-related issues with overweight or obese patients.

Worksite Settings

Many employers have implemented highly effective worksite health programs and have realized great economic benefits²⁵ as well as the potential returns in greater productivity and employee morale. Several health insurance companies and some state governments have taken a "walk the talk" approach, insisting that their employees meet certain health standards or face financial penalties.²⁶ Such tactics are punitive and regressive. Instead, best practices need to be developed and disseminated, as the Partnership for Prevention's Worksite Health Web site is doing (see Appendix A):

- Educate employers how they can use positive incentives to support obesity prevention and control.
- Analyze the costs vs. benefits of requiring health plans to cover enumerated services.
- Propagate access to such tools as the National Business Group on Health's A Purchaser's Guide to Clinical Preventive Services: Moving Science into Coverage.²⁷
- Catalog incentives and benefits employees can take advantage of through their health plan or human resources department that encourage obesity prevention, diagnosis, counseling, and treatment.

- Elucidate how employers can use non-punitive incentives, such as changes in co-payments or premiums, to promote employees' achieving health goals, while maintaining both privacy and nondiscrimination. Suggest they consider incentives for incremental goals, rather than taking an "all or nothing" approach: loss of 10% of body weight carries with it significant health gains, even if the person is still obese.²⁸
- Develop and share tax incentives (property, business, and other) and awards programs for employers that offer worksite wellness programs; provide onsite gyms, showers, or exercise facilities (e.g., a running track around the parking lot); subsidize use of exercise facilities by their employees; or provide access to fresh fruits and vegetables in the workplace.
- Build the consensus necessary to amend the 2012 editions of the International Building Code and the Comprehensive Consensus Codes to encourage inclusion of shower facilities in office buildings and to foster access to and use of stairwells.

Community Settings

Land-use planning commissions and zoning laws have a great effect on the built environment, and the built environment in turn can have a significant influence on the physical activity habits of residents. Neighborhood associations, tax increment finance districts (TIFs), and other groups can influence the built environment in more localized areas. Transit-oriented development (TOD, also known as transit-oriented design) takes advantage of mass transit and alternative transit (walking, biking) to create more compact, "livable" communities, often as part of an effort to revitalize an urban core. However, neighborhood-oriented solutions are not "one size fits all." Conference attendees urged those wishing to use the built environment to encourage physical activity to:

- Elucidate the different relevant facets of the built environment for rural, suburban, and urban communities.
- Investigate existing and needed legal and regulatory approaches for tribal health.
- Communicate to taxpayers and legislators how policies and laws affect obesity prevention and control, how they positively and negatively impact the liberties, entitled services, and lifestyle of those who are obese, and illustrate the need for concerted action across settings and sectors.

- Use participatory action approaches to partner with community groups, residents, and government entities.
- Identify and implement effective policies and practices for the built environment that can increase physical activity and appropriate changes in diet.
- Educate community decision-makers on their authority to take health effects into consideration in land-use planning, permit processes, et al.,²⁹ and on the tools available to assist them in doing so. (See the tools available from the National Association of County and City Health Officials, Appendix A).
- Set up a clearinghouse or other shared access for model legislation, codes, ordinances, and neighborhood/community association bylaws that would allow food gardens on private, public, and school property; permit farmers markets, encourage the presence of grocery stores; foster transit-oriented design; and promote "walkable" neighborhoods with bike and pedestrian paths.

Sector-Specific Actions: Government

The law can do many things: it can enable, it can encourage, it can require consideration, and it can enforce action. Law-based actions to prevent obesity can take place at local, county, state, tribal, or federal levels, and can take many forms, e.g., statute law, administrative regulations, or tax or health code provisions. A fundamental concern for government sectors at all levels is pre-emption by the federal government; this issue is addressed in depth in the laws and legal authorities papers. An appropriate attorney should always be consulted to determine the feasibility and authority for any law-based action.

To bring multiple stakeholders together, or to allow new criteria to be considered in a regulatory process, frequently requires special enabling legislation. For example, the end-of-year 2007 Balance report³⁰ notes such actions as "specifies that the department may collaborate with" and "requires that an interagency coordination council be established." Facilitating farmers markets may require legislation specifically exempting them from the definitions of "food establishment" and their employees from the definition of "food handler," or allowing them to operate on government-owned property. Other legislation may be needed to allow or require consideration of health effects in permit processes, or to earmark a portion of mass transit funds for bicycle and pedestrian paths. Regulations may be needed to clarify calculations of "pedestrian" or "recreational" space: a tree-planted median does not give vital shade to pedestrians on sidewalks, and a golf course is a limited-use facility unless it is encircled with shaded pedestrian and bicycle paths. The appropriate level of policy- or law-making body will vary by state and locality. However, incentives, particularly tax incentives, can often be offered at a lower governmental level — though even that may require enabling state legislation.

Summit attendees suggested the following informational action items for specific levels of government:

Federal Government

- Increase the resources available to communities to find, tailor, implement, and evaluate evidencebased practices to prevent and control obesity (e.g., CDC's STEPS program).
- Make needed nutrition information more understandable and usable for the average consumer, e.g., by adopting an easier-to-use food labeling system such as the one developed in the United Kingdom.

State Government

- Collect information, perhaps through the state demographer, that is germane to the prevention of obesity and the promotion of physical activity and healthy eating.
- Create a forum for state attorneys general and other government attorneys to discuss public health law initiatives, such as menu labeling policies.

Local Government

- Governments at all levels can lead by appropriate encouragement of healthy eating and physical activity by their own employees. The *Balance* reports³¹ include many city-based initiatives, including use of health codes, building codes, planning commissions, and various tax incentives to foster physical activity and healthy eating.
- Foster inter-sector cooperation and education. For instance, the Harris County (Texas) Public Health and Environmental Services department has set up a "School Health Leadership Group." Each independent school district in the county is invited to send up to three people to meetings three times a year; most districts send their School Health Coordinator, Child Nutrition Director, and District Health/PE Coordinator.³²
- Set up inter-agency task forces to pool information, share agendas, and coordinate efforts to promote physical activity and reduce caloric intake.

Conclusion

Evaluation of the long-term impact of legal-based efforts to combat the obesity epidemic is still needed, and so "best practices" are still in the exploratory stage. However, there are promising and best-available practices which can be implemented now. Acknowledging the problem and making small, incremental changes in the built and food environments are steps that can be taken at almost any level of policymaking and government. Both creativity and patience will be required. It has taken us more than three decades to create the problem; the solution will not come overnight, but reversing the epidemic is possible. Disseminating the information necessary to do so is the first step.

Appendix A: Selected Information SourcesNATIONAL

- Action for Healthy Kids (Campaign for School Wellness program): http://www.actionforhealthykids.org/
 - AHK State Teams (includes state profiles): http://www.actionforhealthykids.org/state.php
 - Resources and links (submissions welcome): http://www.actionforhealthykids.org/resources. php

Agency for Healthcare Research and Quality (AHRQ)

- Health Care Innovations Exchange, Obesity: http://www.innovations.ahrq.gov/searchSummary.aspx?subject=1&valID=218&query=Obesi ty
- *Health Care Innovations Exchange, Exercise*: http://www.innovations.ahrq.gov/searchSummary.aspx?subject=1&valID=128&query=Exercise
- National Guideline Clearinghouse: http:// www.guidelines.gov/; search "obesity"
- Screening and Interventions to Prevent Obesity in Adults (U.S. Preventive Services Task Force): http://www.ahrq.gov/clinic/uspstf/uspsobes.htm
- Alliance for a Healthier Generation (a partnership of the American Heart Association and the William J. Clinton Foundation): http://www.healthiergeneration.org/
- Association for Supervision and Curriculum Development: http://www.ascd.org
- Center for Science in the Public Interest: http:// www.cspinet.org/

- National Alliance for Nutrition and Activity: http://www.cspinet.org/nutritionpolicy/nana. html; Includes Model School Wellness Policies and selected resources for developing, implementing, and monitoring/reviewing of local wellness policies.
- Centers for Disease Control and Prevention (CDC): http://www.cdc.gov/; Includes the famous animated map graphically showing obesity trends from 1985 to 2007: http://www.cdc.gov/nccdphp/dnpa/obesity/
 - ACES: Active Community Environments promotes walking, bicycling, and the development of accessible recreation facilities: http://www.cdc.gov/nccdphp/dnpa/physical/health_professionals/active_environments/aces.htm
 - Kids Walk-to-School: http://www.cdc.gov/ nccdphp/dnpa/kidswalk/
 - The Nutrition, Physical Activity, and Obesity Program (NPAO) is implementing a social-ecological model in 23 states, and provides numerous tools and resources: http://www.cdc.gov/nccdphp/dnpa/obesity/state_programs/index.htm
 - *Steps Program* (cooperative agreement that provides funding for evidence-based community interventions): http://www.cdc.gov/steps/
- Council of Better Business Bureaus (CBBR);
 National Advertising Division and Children's
 Advertising Review Unit (both overseen by the
 National Advertising Review Council) and the
 Children's Food and Beverage Advertising Initiative: http://us.bbb.org, click BBB for Businesses,
 click Advertising Review Services.
 All of these are voluntary self-regulation
 programs.
- Federal Trade Commission (FTC): http://www.ftc. gov/bcp/menus/resources/guidance/foodmarketing.shtm Guidance documents on food marketing to children and adolescents, including the July 2008 report to Congress on Marketing Food to Children and Adolescents: A Review of Industry Expenditures, Activities, and Self-Regulation.

Food and Food Marketing Policy Centers

- Agricultural and Food Policy Center, Texas A&M University: http://www.afpc.tamu.edu
- Food Marketing Policy Center, University of Connecticut: http://www.fmpc.uconn.edu/
- Rudd Center for Food Policy and Obesity, Yale University: http://www.yaleruddcenter.org

Institute of Medicine (IOM): http://www.iom.edu/

- Standing Committee on Childhood Obesity
 Prevention: http://iom.edu/CMS/3788/51730.
 aspx, which has links to the IOM reports on
 - Preventing Childhood Obesity: Health in the Balance (2004)
 - Food Marketing to Children and Youth: Threat or Opportunity? (2005) (see also the 2008 report released from the Federal Trade Commission)
 - Progress in Preventing Childhood Obesity: How Do We Measure Up? (2006)
 - Nutrition Standards for Foods in Schools (2007).

Kaiser Family Foundation: http://www.kff.org/

- *Study of Media and Health*: http://www.kff. org/entmedia/index.cfm
 - First Analysis of Online Food Advertising Targeting Children
 - the annual Sex on TV reports
 - a research brief on how children's media use may create sleep problems (in turn linked to obesity)

Keystone Center: Center for Science and Public Policy: http://www.keystone.org/

- *Health Policy* section (http://www.keystone.org/spp/health-practice.html) with links to:
 - Keystone Forum on Away-from-Home Foods: Opportunities for Preventing Overweight and Obesity
 - Youth Policy Summit on Child and Adolescent Nutrition in America
 - Keystone National Policy Dialogue on Food, Nutrition, and Health

National Association of State Boards of Education: http://www.nasbe.org/, particularly the

• *Center for Safe and Healthy Schools*: http://www.nasbe.org/index.php/shs a partnership of NASBE and DASH (CDC's Division of Adolescent and School Health).

National Association of County and City Health Officials (NACCHO)

- Healthy Development Measurement Tool: http://www.thehdmt.org/
- *The Built Environment and Health* (Websites and articles): http://www.thehdmt.org/built_environment.php
- National Connection for Local Public Health: Toolbox: http://www.naccho.org/toolbox

National Governors Association, Center for Best Practices

• Shaping a Healthy America: A Decision-Making Guide: http://www.subnet.nga.org/ healthyamerica/guide/

Partnership for Prevention:

- *Worksite Health*: http://www.prevent.org/content/view/29/40/
 - · Leading by Example Reports
 - Evidence Base for Worksite Health
 - Policy and Advocacy on Obesity, Activity, and Nutrition
 - · Policy and Advocacy on Worksite Health
 - Effective strategies

Public Health Law and Policy: http://www.phlpnet. org/programs.html

- *Menu labeling ordinances* from around the country: http://www.phlpnet.org/ords.html
- Planning for Healthy Places: http://www.healthyplanning.org/

land use, economic development, other built environment policy strategies (formerly the Land Use and Health Program)

• School Health Law Project: http://www.school healthlaw.org/

Robert Wood Johnson Foundation: http://www.rwjf.org Publications, research, issues, policy briefs:

- *Childhood Obesity*: http://www.rwjf.org/childhoodobesity/
- Obesity: http://www.rwjf.org/pr/topic. jsp?topicid=1024
- *Physical Activity*: http://www.rwjf.org/pr/topic.jsp?topicid=1067
- Reports on State Action... ("Balance" Reports): http://www.rwjf.org/childhoodobesity/search.jsp and refine by searching for "Balance"

Programs:

- *Active Living by Design*: Increasing physical activity through community design: http://www.activelivingbydesign.org/
- Leadership for Healthy Communities:
 Advancing Policies to Support Healthy Eating and Active Living: http://leadershipforhealthy communities.org/
- Fact sheets, policy briefs, reports, profiles, toolkits, and numerous other resources.

Safe Routes to School (National Center): http://www.saferoutesinfo.org/

Trust for America's Health: http://healthyamericans.org

Annual F as in Fat: How Obesity Policies Are Failing In America report (2004), which includes state by state obesity rates and rankings; see the interactive map at http://healthyamericans.org/reports/obesity2008/

- U.S. Department of Agriculture, Food and Nutrition Service
 - WIC Farmers' Market Nutrition Program: http://www.fns.usda.gov/wic/fmnp/FMNPfaqs. htm
 - Senior Farmers' Market Nutrition Program: http://www.fns.usda.gov/wic/SeniorFMNP/ SFMNPmenu.htm
- U.S. Department of Health and Human Services
 - *Dietary Guidelines for Americans*: http://www.health.gov/DietaryGuidelines/
 - *Physical Activity Guidelines for Americans*: http://www.health.gov/PAGuidelines/
- U.S. Food and Drug Administration (FDA): http://www.usda.gov/wps/portal/usdahome
 See particularly the Farm Bill and Food and Nutrition sections

STATE AND LOCAL

Arkansas Center for Health Improvement: http://www.achi.net/index.asp

New York City Department of Health and Mental Hygiene: http://www.nyc.gov/html/doh/html/home/home.shtml for information on the NYC calorie-posting (http://www.nyc.gov/html/doh/html/cdp/cdp_pan-calorie.shtml) and "green cart" (http://www.nyc.gov/html/doh/html/cdp/cdp_pan_green_carts.shtml) ordinances. The

revised and upheld calorie-labeling ordinance is at http://www.nyc.gov/html/doh/downloads/pdf/public/notice-adoption-hc-art81-50-0108.pdf

The Food Trust (Philadelphia): http://www.the-foodtrust.org/

- Comprehensive School Nutrition Policy Initiative for the Philadelphia school district (with a Healthy Schools Toolkit): http://www.thefoodtrust.org/php/programs/comp.school.nutrition.php
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Legal Action Options Table

TOPIC		SETTING	FEDERAL	STATE	
Food Environment, Production,	Agriculture	National Com- munity	Provide subsidies for the production and supply of domestic fruits and vegetables for domestic consumption. [Farm Bill]		
Access			Expand support of farmers markets and community gardens [Farm Bill; Federal appropriations]		
		Worksites		Use tax incentives and awards for businesses to provide access to fresh fruits and vegetables in the workplace (e.g. farm to work programs; On-site garden markets)	
		School		Permit procurement of and incentivize use of local farm products under school vendor contracts farm to school	
	Nutrition Programs and Policy	National Community	Permit and reimburse farmers/local growers to participate in federal programs through use and access of wireless payment equipment (EBT). [Farm Bill/SNAP; Child Nutrition and WIC Act]	Support healthy food coalitions that convene citizens and government officials for the purpose of providing a comprehensive examination of a state or local food system (e.g. Food Policy Councils)	
			Restrict EBT funds available through federal programs to nutritionally positive foods and beverages. [Farm Bill/SNAP; Child Nutrition and WIC Act]		
		Prisons; Hospitals; CBOs	Mandate that meals provided in facilities receving federal funds meet nutritional standards based on DGA requirements [Commerce Clause]		
			Develop strong nutrition standards on which to assess and evaluate government contracts for the purchase of food for hospitals, prisons, schools or other facilities. Procurement	Develop strong nutrition standards on which to assess and evaluate government contracts for the purchase of food for hospitals, pris- ons, schools or other facilities. Procurement	
				Create incentives through the public contracting process, to allow public bidding processes for private sector food vendors to improve the nutritional quality of the foods served in hospitals, prisons, schools or other facilities. Procurement	
		School	Mandate improved nutrition standards in school food programs; expand and update the definition of Foods of Minimal Nutritional Value and revise to include the entire school day and campus. (e.g. require that meals provided under federally funded programs meet DGA requirements [NSLP; NSB]	Adopt nutritional standards for competitive foods (use industry voluntary guidelines as a floor and incorporate professional recommendations and DGA requirements [vending contracts]	
			Permit schools to use non USDA provided foods as long as foods exceed minimal nutritional value [NSLP; NSB] Procurement		
				Mandate calorie labeling on school menus and in school cafeterias; provide information to parents and PTAs	

LOCAL	OTHER (Tribal, NGOs, Academia, Employers)
Permit/Encourage/Incentivize farmer's markets and food gardens on both private and public property [Modify city codes, neighborhood assocation covenants/bylaws; Create tax incentives]	
Eliminate food desserts and increase access to fresh produce through zoning ordinances that permit farmers markets and community gardens	
Encourage coordination among local farmers and school districts to offer schools fresh local foods through vendor contracts	
Support healthy food coalitions that convene citizens and government officials for the purpose of providing a comprehensive examination of a state or local food system (e.g. Food Policy Councils)	
Modify vending machine contracts, use industry voluntary guidelines as a floor (not ceiling) and incomporating public health recommendations to promote or subsidize healthy foods.	Modify vending machine contracts, use industry voluntary guidelines as a floor (not ceiling) and incomporating public health recommendations
Develop strong nutrition standards on which to assess and evaluate government contracts for the purchase of food for hospitals, prisons, schools or other facilities. Procurement	
Create incentives through the public contracting process, to allow public bidding processes for private sector food vendors to improve the nutritional quality of the foods served in hospitals, prisons, schools or other facilities. Procurement	
Adopt nutritional standards for competitive foods (use industry voluntary guidelines as a floor and incorporate professional recommendations and DGA requirements [vending contracts]	Improve nutritional guidelines in schools serving American Indian school children on resevations Tribal
Ban sale of competitive foods on school grounds	
Mandate calorie labeling on school menus and in school cafeterias; provide information to parents and PTAs	

TOPIC		SETTING	FEDERAL	STATE	
Food Environment, Production,	Zoning	School		Enact laws to limit siting of quick-service restaurants within reasonable distance of public schools.	
Access		Community			
	Disparities	Community			
	Food Labeling and Marketing	Community	Enact menu labeling law or expand NLEA to require disclosure of nutritient content in quick service restaurants	Enact menu labeling laws	
			Adopt easier-to-use food labeling systems [NL EA]		
			Include recommended daily value of added sugars on Nutrition Facts Panel [NLEA]		
			Adopt standardize front of package label quick reference symbols based on nutritional requirements.		
		Schools		Ban or restrict marketing of foods and beverages in schools based on nutritional requirements	
	Breastfeeding	Worksites	Enact legislation to require or incentivize employ- er accommodation and support of breastfeeding mothers	Enact legislation to require or incentivize employer accommodation and support of breastfeeding mothers	
			Develop standards for accomodating breastfeed- ing mothers [Child Nutrition Program/BF promo- tion program]	Develop standards for accomodating breast- feeding mothers [Child Nutrition Program/ BF promotion program]	
		Community; Healthcare;Work- sites	Develop standards for BF accomodation either mandating lactation rooms based on a formula or for implementation in the event an employer chooses to provide such services. [Pregnancy Discrimination Act]		
		Hospital		Require physician's prescription to obtain formula for healthy newborns in hospitals.	

LOCAL	OTHER (Tribal, NGOs, Academia, Employers)
Enact laws to limit siting of quick-service restaurants within reasonable distance of public schools.	
Limit or eliminate permits for siting of fast food restaurants in residential areas (e.g. based on density/concentration relative to sit-down restaurants).	
Incentivize initiatives to promote healthy food access in 'food deserts' (e.g. incentives for grocery stores and supermarkets, such as the Fresh Food Financing Initiative; Incentivize F/V sales in corner stores/bodegas; Allow and incentivize mobile F/V vendors and 'green carts')	Strengthen the nutritional quality of the USDA food programs directed at American Indian communitities
Expand/Exercise the authority of local officials to regulate food environment (e.g. power to require mobile vendors to sell produce/healthy snacks; prohibit siting of new quick-service restaurants in neighborhoods with disproportionate share of such facilitites)	
Enact menu labeling laws	
Ban or restrict marketing of foods and beverages in schools based on nutritional requirements	
Enact legislation to require or incentivize employer accommodation and support of breastfeeding mothers	Adopt a workplace breastfeeding policy and establish employee lactation support programs.
Develop standards for accomodating breastfeeding mothers [Child Nutrition Program/BF promotion program]	
Require physician's prescription to obtain formula for healthy newborns in hospitals.	Require physician's prescription to obtain formula for healthy newborns in hospitals.

TOPIC		SETTING	FEDERAL	STATE	
Physical Activity Environ- ment	Transportation	National Com- munity	Increase funding for public transit and physically active forms of transportation [SAFETEA-LU].	Ensure dedicated source of funding for public and physical transit (walking, biking).	
ment					
	Land Use, General Plans,	National Com- munity	Consider public health impact of all legislative initiatives	Consider public health impact of all legislative initiatives	
	Development		Advocate for environmental review laws to include public health impact assessments	Empower under state law and offer initiatives to local gov't to regularly revise and adopt comprehensive land use plans to promote mixed land use and physical activity.	
				Mandate under state building codes minimum standards for commercial building codes that incorporate obesity prevention principles	
		Schools			
	Disparities	es Community		Provide incentives to maintain or revitalize town centers, especially in rural areas, to stimulate physical activity and improve healthful food options.	
				Establish minimal levels of public health and safety protections under state housing and building codes.	
				Enhance state redevelopment law to require a percentage of Tax Increment Financing (TIF) generated in redevelopment districts to be dedicated towards smart growth developments, playground construction and repair, bike lanes and other infrastructure needs in under-resourced communities	
		Community; School	Offer a financial match for school capital improvement funds to encourage states to engage in joint use activities.	Facilitate joint-use initiatives for using school grounds for broad community physical activity (particularly in disadvantaged communities with fewer options for safe places to be physically active). Leverage incentives to underwrite costs for joint-use arrangements to open up school facilitites for after-school use (e.g. capital funds, supplemental grants, cost-sharing arrangements, private philanthropy).	
			Provide federal grants, awarded through an appropriate state level agency, to local planning teams to support joint use planning processes		
	Policy	Community	Integrate obesity prevention and control strategies into existing policies (e.g. SAF-ETEA-LU for safe bike and walking routes).	Fund Park & Recreation Departments to ensure free, potable water at all public parks and recreational facilities.	
				Adopt a state model to finance outdoor recreation (similar to those used in some states to finance classrooms, libraries, and community theatres).	_
		Daycare; After- Care			

LOCAL	OTHER (Tribal, NGOs, Academia, Employers)
Ensure sufficient funding for public and physical transit (walking, biking) to qualify for federal match of funds under SAFETEA-LU (20 percent must be provided).	
Modify neighborhood assocation codes or bylaws to foster transit- oriented design, and promote a "walkable" neighborhood with bike and pedestrian paths, etc	
Require public health impact assessments for new developments	
Enact and update comprehensive land use plans to promote mixed land use and access to public transit, supermarkets, and recreation facilitites/ areas.	Demonstrate how state governments can offer fiscal/financial incentives to local governments to regularly revise and adopt comprehensive land use plans with obesity prevention elements
Integrate obesity prevention principles into commercial building codes and tax incentive policies	
Zone, build and coordinate physically active-oriented designs [green open spaces, safe routes to school, sidewalks, bike/pedestrian transportation paths, recreation paths].	
Incentivize schools and other agencies to work together to find appropriate sites for new (or newly rehabilitated) schools — sites that are located to encourage walking/biking to school and are in close proximity to the neighborhoods they serve.	
Provide incentives to maintain or revitalize town centers, especially in rural areas, to stimulate physical activity and improve healthful food options.	
Facilitate joint-use initiatives for using school grounds for broad community physical activity (particularly in disadvantaged communities with fewer options for safe places to be physically active). Leverage incentives to underwrite costs for joint-use arrangements to open up school facilitites for after-school use (e.g. capital funds, supplemental grants, cost-sharing arrangements, private philanthropy).	Offer in-kind services or on-going programming (instead of financial contributions) to support joint use initiatives.
Incentivize new schools, at the time of siting, to discuss joint use (or co-location) possibilities during the planning stages and devise a good faith process to enhance cooperation.	
Fund Park & Recreation Departments to ensure free, potable water at all public parks and recreational facilities.	
Use licensing provisions to foster appropriate physical activity for the children in after-school and daycare facilities. Requirements	

TOPIC		SETTING FEDERAL		STATE	
Health and Wellness Promotion Programs	Program Sup- port	Worksite	Provide fiscal incentives in the form of tax rebates or other financial awards to facilitate the adoption and maintenance of workplace health promotion programs. [e.g. Healthy Workforce Act]	Provide incentives and awards for business to promote health through comprehensive workplace programs (e.g. tax credits for onsite wellness programs, showers and exercise facilities, walking/recreation paths around parking lots; subsidize use of exercise and health facilitites by employees)	
			Provide federal tax deductions to individuals to minimize costs associated with participation in non-subsidized workplace wellness offerings. Incentives	Mandate comprehensive workplace health promotion programs in all State agencies	
				Provide incentives for businesses to develop community partnerships that promote obesity prevention and control strategies in communities, schools, and health care organizations	
			Mandate comprehensive workplace health promotion programs in all federal agencies (HWI)		
	Policy	Worksite	Integrate obesity prevention and control strategies into existing policies (e.g. OSHA regulations to incorporate in workplace safety activities.	Integrate obesity prevention and control strategies into existing policies (e.g. OSHA regulations to incorporate in workplace safety activities.	
		Worksite; School; Medical			
		School	Redraft school wellness policy legislation to include meaningful implementation and enforcement provisions [Childhood Nutrition and WIC Reauthorization Act]		
				Implement specific PA, PE and Health education curriculum requirements for all students in all grade levels (e.g. NASPE recommendations)	
			Fund national obesity prevention and control efforts that provide integrated approaches to surveillance, research and programming across the intervention settings.		

LOCAL	OTHER (Tribal, NGOs, Academia, Employers)
Create incentives for business to promote health (e.g. tax credits to offer wellness programs; showers or exercise facilities in office buildings; walking/recreation paths around parking lots)	Develop incentives and benefits for employees to maintain healthy behaviors through HR department
Modify building codes to encourage inclusion of shower facilities in office buildings	Leverage federal and state tax incentives to encourage comprehensive workplace health promotion programs
Modify building and fire codes to promote stairwell access and use in office buildings;	Implement by-pass provisions in wellness programs to ensure that innovation in behavioral intervention science is appropriately reflected in program design.
Extending communication from schools to communication with community organizations and worksite managers to create linkages to comprehensive wellness programs in those settings	
Monitor and enforce provisions in school wellness policies	
Implement specific PA, PE and Health education curriculum requirements for all students in all grade levels (e.g. NASPE recommendations)	

ТОРІС	SETTING	FEDERAL	STATE
Surveillance, Research, Evaluation, Education	Community	Fund surveillance of health indicators related to obesity prevention and control and the development and evaluation of related best practices	Fund to communities to implement best practices to prevent and control obesity
	All	Develop Web Portal for legal and policy practices: best, promising, unsuccessful	Classify obesity as a reportable health condition and establish online obesity registry system.
		Create Central Listing of funding sources and resources	Require state demographer to collect information/data germane to the prevention of obesity and the promotion of physical activity and health eating Surveillance
		Develop tools and tool kits for law-based obesity prevention and control strategies (model legislation, policies, and agreements; working with legislative committees; substantive and procedural requirements of laws and regulations) and health impact assessment of laws and public policies.	
		Create evidence-based assessment tools, such as community "report cards", that enable policy makers to evaluate and mark progress toward obesity prevention and control.	
		Develop and disseminate education materials related to assessing the health impact of laws and public policies and guidance documents addressing the basic substantive and procedural requirements of laws and regulations (e.g. case studies and legal and public policy primers).	
		Develop internship placement opportunities within legal and policy-making agencies for public health students and within public health agencies and academic centers for students of law, public administration, planning, architecture, engineering, and education.	
		Fund research to improve research base related to obesity prevention and control, including policy and environmental change best practices, cost effectiveness, surveillance and epidemiological studies.	Fund research to improve research base related to obesity prevention and control, including policy and environmental change best practices, cost effectiveness, surveillance and epidemiological studies.
	School	Address issues complicating use of school health records for non-emergency Public Health purposes [FERPA]	Adopt BMI measurement of students for public health surveillance and screening.
			Establish pilot programs for school health reports (aggregrate school or district level)

LOCAL	OTHER (Tribal, NGOs, Academia, Employers)
Implement evidence-based practices to prevent and control obesity	Implement best practices to prevent and control obesity
Establish online obesity registry system.	Develop Web Portal for legal and policy practices: best, promising, unsuccessful
	Expand and strengthen legal and public policy training components of public health graduate school curricula and continuing education and professional development opportunities
	Develop tools and tool kits for law-based obesity prevention and control strategies (model legislation, policies, and agreements; working with legislative committees; substantive and procedural requirements of laws and regulations) and health impact assessment of laws and public policies.
	Create evidence-based assessment tools, such as community "report cards", that enable policy makers to evaluate and mark progress toward obesity prevention and control.
	Develop and disseminate education materials related to assessing the health impact of laws and public policies and guidance documents addressing the basic substantive and procedural requirements of laws and regulations (e.g. case studies and legal and public policy primers).
	Develop internship placement opportunities within legal and policy-making agencies for public health students and within public health agencies and academic centers for students of law, public administration, planning, architecture, engineering, and education.
	Fund research to improve research base related to obesity prevention and control, including policy and environmental change best practices, cost effectiveness, surveillance and epidemiological studies.
Adopt BMI measurement of students for public health surveillance and screening.	
Establish pilot programs for school health reports (aggregrate school or district level)	

TOPIC		SETTING	FEDERAL	STATE	
Over- weight and Obesity Prevention	Coverage, Re- imbursement	Medical	Adopt universal healthcare that includes providion of evidence-based obesity prevention and management benefits.	Establish coverage for comprehensive obesity counseling and health interventions for children identified as at risk or already obese under state Medicaid and SCHIP programs.	
and Care Services (Screening, Counseling,			Improve Medicare funding reimbusement rates for overweight and obesity-related visits.	Increase and expand Medicaid coverage and reimbursement rates to providers for obesity prevention and care services.	
Treatment)			Clarify coverage for prevention, screening, counseling, and treatment of overweight and obesity under federal and state laws (ERISA, SSA, ADA)	Require managed care organizations, as condition of participation in Medicaid and SCHIP, to offer childhood obesity prevention and treatment services	
			Modify SSA to cover preventive (primary) and treatment (secondary and tertiary) services for obesity for children and adults. [SSA]	Adopt pay for performance incentives for state Medicaid and SCHIP programs to promote higher quality performance in obesity prevention and management at the clinical practice and health system level. (e.g. incentives for adherence to age and gender appropriate disease screenings linked to positive disease control outcomes, regardless of race or ethnicity)	
			Identify which reimbursement codes can be used for obesity prevention, control and treatment, including surgery for the morbidly obese. [Deficit Reduction Act]?	Ensure full coverage of EPSDT under SCHIP program along with appropriate counseling services	
			Require coverage of behavioral and nutrional counseling and prescription meds within mandatory medical treatment of morbid obesity provisions, regardless of whether bariatric surgery is performed	Regulate Medicaid programs to focus on preventative measures	
			Create medical home model of care for Medicaid beneficiaries to improve overall care delivery, including obesity-related care, and to improve patient disese self-management.	Create medical home model of care for Medicaid beneficiaries to improve overall care delivery, including obesity-related care, and to improve patient disese self-management.	
				Eliminate requirements for prior authorization for overweight and obesity prevention services and for medically-indicated treatment associated with obesity.	
			Permit states to prohibit insurers from under- writing obesity as a health condidtion in its own right in the small group and individual insurance markets.	Clarify coverage for prevention, screening, counseling, and treatment of overweight and obesity under state laws	
			Develop new HEDIS measures to encourage HC providers to address nutrition and physical activity with overweight and obese patients	Identify obesity reduction initiatives as a condition of award to local health agencies and other program recipients under Title V maternal and child health programs.	
			Revising administration simplification provisions, such as the Privacy Rule of the Health Insurance Portability and Accountability Act, as an exploratory option to identify what is needed to facilitate information sharing while addressing individual privacy concerns.		
		School	Provide school health obesity prevention and treatment grants	Provide school health obesity prevention and treatment grants	
	Disparities		Incentivize hospitals governed by §501(c)(3) obligations to implement obesity prevention and management initiatives.		
			Incentivize states to work with community health center primary care associates to provide obesity prevention and treatment services in medically underserved communities	Expand health centers to include child and family obesity prevention and treatment services in all medically underserved communities	
			Expand access to community health centers under Medicaid services	Expand access to community health centers under Medicaid services	

LOCAL	OTHER (Tribal, NGOs, Academia, Employers)
	Require employer-sponsored health plans to institute as a medical benefit coverage of overweight and obesity-related prevention and care services.
	Develop non-punitive incentives and benefits within employer health plans (e.g. co-pays/premium) to promote employee attainment of health goals and maintanence of healthy behaviors
	Adopt pay for performance incentives for public and private employer sponsored group benefit plans to promote higher quality performance in obesity prevention and management at the clinical practice and health system level. (e.g. incentives for adherence to age and gender appropriate disease screenings linked to positive disease control outcomes, regardless of race or ethnicity)
	Update and make available clinical practice guildelines for obesity prevention and treatment

Obesity Prevention and Control Legal Bibliography

Introduction

The obesity prevention and control legal bibliography provides a starting point for learning more about the intersection of obesity and law. The bibliography is not intended to be all-inclusive of the literature on obesity and the law, but it is intended to be a credible source of information about the influence law can have on the public health issue of obesity prevention and control.

Methods in Creating the Bibliography

In creating the bibliography, we established an initial parameter for items published in public health, medical, and law journals after January 1, 2000. The bibliography includes articles accepted for publication, but not published, if the article is accessible electronically through PubMed.

To identify articles in the public health and medical literature, a PubMed search was conducted using selected query terms as listed in Box 1.

To identify articles in the legal literature, Lexis Nexis and Westlaw searches examined U.S. law journal databases for articles containing "obesity" in their titles.

The results from these searches were reviewed for relevance. Articles were excluded if (1) they failed to address either obesity or law; (2) they addressed legal approaches to obesity only within the larger issue of chronic disease; (3) their focus on law was minor; or (4) they bore a limited relation to the issue of obesity and law within the U.S. Based on a review of the article abstracts and introductions, the articles were divided into topical categories, the descriptions of which are below. Some of the articles fit into multiple cate-

gories, but are in the category that appeared most relevant. Included at the end of the bibliography are selected reports and tools.

Box 1. PubMed Search Terms

Built environment

Court

Courts

Farm Bill

Fast food

Law

Legal

Legislation

Litigation

Menu

Obesity

Overweight

Physical Activity

Regulations

CATEGORIES

Legal Strategies for Preventing or Reducing Obesity
Public health professionals and the legal practitioners
who advise them have become increasingly aware that
legal strategies are useful to address the obesity epidemic. Laws and legal authorities impact the nutrition
standards at our nation's schools, subsidies to farmers,
zoning and transportation that impact our physical
activity and insurance regulations that impact how
professionals treat obesity.

The articles in this section primarily address two issues: (1) Should government take a role in preventing the obesity epidemic, and if so what is its appropriate role? and (2) What legal strategies are likely to be most effective in combating the obesity epidemic? Articles fitting within this topic have been divided into four sub-categories depending on which legal avenue the article emphasizes.

The General Use of Law

The following articles address the use of law generally to fight the obesity epidemic. Several address the broader issue of whether government should be involved in the fight against obesity. Several present theoretical legal approaches to framing the issue of obesity and several discuss multiple legal approaches to reducing the prevalence of obesity.

General

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The Use of Community-Based Policies:

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Legal Challenges Posed by a Growing Population: The following articles address some of the issues posed by having a heavier population. With an increasing percentage of the U.S. population overweight or obese, legal questions have arisen regarding how people and institutions react to obesity. These include the legal issues posed by workplace wellness programs and whether institutions should be permitted to discriminate based on weight.

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Additional References - Reports and Tools

• The following are added references that will be useful to the reader who has an interest in the general policy issues addressing obesity prevention and control.

Reports and Tools

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Appendix

Collaborating Organizations

American Bar Association

American Public Health Association

Association of State and Territorial Health Officials

International City/County Management Association

Milbank Memorial Fund

National Association of Chronic Disease Directors

National Association of County and City Health Officials

National Conference of State Legislatures

National Foundation of Women Legislators

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Agenda

Wednesday, June 18, 2008

9:00 a.m. - 5:00 p.m. Registration

11:00 a.m. – 12:30 p.m. Lunch and Presentations:

Policy Initiatives in Obesity Prevention

Honorable Leticia Van de Putte, R.Ph.

Texas State Senate San Antonio, TX

Salons DEFG

12:30 p.m. - 12:45 p.m. Break

12:45 p.m. - 1:00 p.m. Welcome

George Mensah, M.D., F.A.C.P., F.A.C.C. Associate Director for Medical Affairs

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Centers for Disease Control and Prevention

Salons DEFG

1:00 p.m. - 1:45 p.m. Opening Plenary Address

"Local Authority and the Challenges of Obesity: The New York City

Experience"

Mary T. Bassett, M.D., M.P.H.

Deputy Commissioner, Health Promotion and Disease Prevention

New York City Department of Health & Mental Hygiene

Salons DEFG

1:45 p.m. - 3:00 p.m. Obesity and the Public Health Framework

William Dietz, M.D., Ph.D.

Director, Division of Nutrition, Physical Activity and Obesity

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The Structural Framework and the Role of Governments

Demetrios Kouzoukas, J.D. Associate Deputy Secretary

U.S. Department of Health and Human Services

Overview of the Working Summit Program

Anthony Moulton, Ph.D.

Co-Director, Public Health Law Program

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Salons DEFG

3:00 p.m. - 3:15 p.m. Break

3:15 p.m. – 5:15 p.m. Reports from Status Paper Lead Authors

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Peter D. Jacobson, J.D., M.P.H. Professor of Health Law and Policy

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Salons DEFG

7:30 p.m. Movie and Discussion: "King Corn"

David Wallinga, M.D., M.P.A. Director, Food and Health Program Institute for Agriculture and Trade Policy

Summit, Wood, and Lake

Thursday, June 19, 2008

8:00 a.m. - 5:00 p.m. Registration

8:30 a.m. – 9:00 a.m. Plenary: Summit Methodology

Richard Goodman, M.D., J.D., M.P.H. Co-Director, Public Health Law Program Centers for Disease Control and Prevention

Salons DEFG

9:00 a.m. - 9:10 a.m. Break

9:10 a.m. - 10:15 a.m. Core Element Work Group Sessions

A. Laws and Legal Authorities-Salon A

B. Competency in Application of Law and Legal Tools-Salon B

- C. Coordination Across Sectors and Jurisdictions-Salon C
- D. Information and Best Practices-Dogwood

10:15 a.m. - 10:30 a.m.

Break

10:30 a.m. - 12:30 p.m.

Setting-Specific Work Group Sessions

- A. School Settings
 - Legal Authorities/Coordination-Salon A
 - Competencies/Best Practices-Salon B
- **B.** Worksite Settings
 - Laws and Legal Authorities/Coordination-Salon C
 - Competencies/Best Practices-Dogwood
- C. Community Settings
 - Laws and Legal Authorities/Coordination-Barberry
 - ullet Competencies/Best Practices-Holly
- D. Medical/Clinical Settings
 - Laws and Legal Authorities/Coordination-Juniper
 - Competencies/Best Practices-Magnolia

12:30 p.m. - 12:45 p.m.

Break

12:45 p.m. - 2:00 p.m.

Lunch and Presentation

William Bolling, M.A.

Director

Atlanta Community Food Bank

Salons DEFG

2:00 p.m. - 2:15 p.m.

Break

2:15 p.m. - 3:45 p.m.

Plenary: Reports from Setting-Specific Sessions

Setting Specific Session Facilitators

Salons DEFG

3:45 p.m. - 4:00 p.m.

Break

4:00 p.m. - 5:00 p.m.

Topical Concurrent Sessions

Agriculture and Food Production 101

Neil Hamilton, Ph.D.

Opperman Professor of Law

Director, Agriculture and Law Center, Drake University Law School

Salon A

Access to Healthy and Affordable Foods

David Adler, M.G.A.

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Salon B

Land Use and Zoning

Robert Ogilvie, Ph.D.

Program Director, Planning for Healthy Places

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Sarah Strunk, M.H.A.

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Active Living by Design

Salon C

BMI Surveillance

Kevin Ryan, J.D.

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 $\it Joyal\, Mulheron$

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Dogwood

Friday, June 20, 2008

8:00 a.m. - 9:30 a.m.

Continental Breakfast

8:30 a.m. - 9:30 a.m.

Topical Concurrent Sessions

Schools: Safe Routes and Standards for Physical Activity and Education

Sherry Everett-Jones, J.D., M.P.H., Ph.D.

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Lisa Soronen, J.D.

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Salon A

Preemption and Federalism

David Benor, J.D.

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Thomas Merrill, J.D.

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Salon B

Consumer Disclosure

Amanda Purcell-Bloom, M.P.H.

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California Center for Public Health Advocacy

Jacob Sullum Senior Editor Reason Foundation

Salon C

9:30 a.m. - 11:30 a.m.

Plenary: Reports from Action Agenda Lead Authors

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Salons DEFG

11:30 a.m. - 12:00 p.m.

Summary and Next Steps

Anne Haddix, Ph.D.

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Salons DEFG

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